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TRIBUTE TO WILLIAM FOXWELL ALBRIGHT

To a great scholar and gentleman, William Foxwell Albright, we pay glad tribute of admiration and affection on the occasion of his seventieth birthday.

As archaeologist and Orientalist, he has been both pathfinder and interpreter of extraordinary importance. Through archaeological explorations and excavations, through numerous publications and students, he has contributed immeasurably to the knowledge and understanding of

the ancient Near East, and thereby to a deeper appreciation of the present.

Ever friendly and helpful, deeply religious and scientifically devoted and creative, he remains restlessly active. The years have not stayed his drive for the advancement of human enlightenment.

For all who have had the privilege of direct association with him and for all who admire and honor him, we send our heartfelt salutations and implore God's blessing upon him and his family.

Committee on behalf of Colleagues, Students, Friends of Prof. William F. Albright:

NELSON GLUECK
G. ERNEST WRIGHT

[On May 24, 1961, Professor Albright reached the milestone of his seventieth birthday. The occasion was celebrated at the Hebrew Union College in Cincinnati, where he has been the Efroymson Memorial Visiting Professor of Biblical Archaeology during the winter and spring quarters. A dinner in his honor was attended by a large number of his colleagues, friends and former students. Later in the evening, Professor Albright delivered the Goldenson Lecture for 1961 in the College Chapel under the title "Samuel and the Beginnings of the Prophetic Movement" (to be published by the Hebrew Union College Press). At the conclusion of the lecture, Professor G. Ernest Wright of Harvard University presented to him *The Bible and the Ancient Near East: Essays in Honor of William Foxwell Albright*, a volume just released by Doubleday Publishers. This book, edited by Professor Wright and remarkable in every way, contains fourteen articles designed to show the progress made during the past forty and more years in various fields in which Professor Albright himself has made substantial scholarly contributions. Ten of the fourteen contributors were Professor Albright's students; they and the other contributors are all recognized authorities on the subjects they discuss. Following Professor Albright's grateful acknowledgment of the volume, President Nelson Glueck of the Hebrew Union College presented to him a scroll inscribed with the testimonial printed above.—R. L. C.]

DECEMBER MEETING OF THE BOARD OF TRUSTEES

The winter meeting of the Board of Trustees was held at the Metropolitan Museum in New York City, beginning at 2:00 p. m. on Tuesday, December 27, 1960. Present of the Trustees were Messrs. Cameron, Colt, Detweiler (President), Glueck, Hamilton, May, Phelps, Reynolds, Wilkinson and Wright; of the Associate Trustees, Hanfmann, Ingholt and Orlinsky (also Evaluation Committee Chairman); in other capacities: Messrs. Bourke (Evaluation Committee), Crawford (Director, Baghdad School; Acting Chairman, Baghdad School Committee), Pope (Jerusalem School, Director, 1959-60), Reed (Executive Assistant to the President), Seiler (Accountant) and Mrs. Walton (Business Manager).

President Detweiler called the meeting to order and declared a quorum present. He introduced Mr. Fowler Hamilton as a new Trustee and announced that Mr. Otto Von Kienbusch had found it necessary to resign for personal reasons. It was voted to adopt the agenda as mimeographed and distributed. It was voted to approve the minutes of the meeting of April 2, 1960 as mimeographed and distributed.

The Fifty-Eighth Annual Report of the President was read by the President. It was voted to receive the Report of the President.

It was voted to ratify the mail vote receiving the following institutions into Corporation membership:

Central Baptist Theological Seminary, Kansas City, Kansas;
Wartburg Theological Seminary, Dubuque, Iowa.

It was voted to receive the following institutions into Corporation Membership:

Harding College, Memphis, Tennessee;
St. Thomas Seminary, Denver, Colorado;
Northern Baptist Theological Seminary, Chicago, Illinois.

In the absence of the Treasurer, the President reported that the Finance Committee had met twice during the year and that the income from investments has been increasing. It was reported by G. Ernest Wright that the amount of the William Foxwell Albright Fellowship Fund, including the original gift and pledges, amounts to approximately $3,600. It was voted to authorize the President to arrange for the announcement of the award of the first William Foxwell Albright Fellowship for study in the Near East for the academic year 1961-62. The amount of the Fellowship will be $2,000; it may be used anywhere in the Near East. Announcements will be sent out as soon as possible in order that the Trustees may approve the award of the Fellowship at the April meeting. The Executive Committee will make a recommendation to the Trustees; if the award is made to an applicant who elects to study at the Jerusalem School, or in connection with the Baghdad School, the respective School committees will administer the Fellowship. It was the sense of the meeting that a second letter should be sent out for the purpose of inviting additional contributions and pledges to this Fellowship Fund.

It was voted to receive the report of Marvin H. Pope, Director of the Jerusalem School in 1959-60, as mimeographed and distributed. It was also voted to express appreciation to Dr. and Mrs. Pope for their efficient services.

The President reported that Robert C. Dentan, Chairman of the Jerusalem School Committee, has found it necessary to resign for personal reasons, but has agreed to serve until another Chairman can be appointed. In the absence of the Chairman, the Executive Assistant to the President reported that the Committee met on December 26, 1960 at the home of Dr. Dentan, who had prepared an informal report indicating that the Committee had been active in considering the problems of the Jerusalem School and in preparing the usual recommendations concerning appointments, fellowships and the routine operation of the School. It was voted, on the recommendation of the Jerusalem School Committee, to make the following appointments for 1961-62:

Honorary Lecturer
Dr. David J. Wieand, Bethany Biblical Seminary, Chicago, Ill.

Fellows
Dr. Dorothea Harvey, Milwaukee-Downer College, Milwaukee, Wis.
Mr. Murray B. Nicol, University of Pennsylvania, Philadelphia, Pa.

Visiting Professors
Dr. Charles F. Kraft, Garrett Biblical Institute, Evanston, Ill.
Dr. James B. Pritchard, The Church Divinity School of the Pacific, Berkeley, Calif.
Dr. G. Ernest Wright, Harvard University, Cambridge, Mass.

It was further reported that previous appointments for 1961-62 have been accepted: Dr. Paul W. Lapp will be Director, Dr. J. A. Sanders, Annual Professor, and Dr. E. Leslie Carlson and Dr. Walter G. Williams, Honorary Lecturers.

It was voted to approve, on the recommendation of Director Grabar and the Jerusalem School Committee, the following expenditures for field work during the current year: $400 for cost of American School personnel participating in the work of the British School of Archaeology at Petra; $500 for soundings to be conducted by Director Grabar at Muwaqqar, Mshatta, Umm al-Walid, etc.; $2100 for soundings at Araq el-Emir to be conducted by Professor Lapp.

Following discussion concerning the possibility of working with the British School of Archaeology at Jerusalem, it was the sense of the meeting that while a joint operation is not desirable at the present time, the President is authorized: 1) to

arrange for an emergency grant to the British School in return for training that may be provided for qualified and interested Jerusalem School personnel; 2) to consult with Corporation members who may wish to participate in the Jerusalem excavation.

It was voted to express appreciation to the Committee and to Chairman Dentan, Director Grabar and Professor Lapp.

The President reported on correspondence pertaining to the financial problems of the Palestine Archaeological Museum. He indicated that the Executive Committee had been in close touch with State Department officials and the officers of the Museum, including Director Grabar. Dr. Glueck suggested that it would be appropriate for the Schools to make a contribution each year from the general fund to the work of the Palestine Archaeological Museum.

Greetings to the Trustees from Director Grabar were presented in connection with the report of the Jerusalem School Committee.

It was voted to receive the report of the Jerusalem School Committee.

It was voted to receive the report of Dr. Vaughn E. Crawford, Director of the Baghdad School, as mimeographed and distributed.

In the absence of the Chairman of the Baghdad School Committee, the Acting Chairman, Dr. Crawford, reported that the Joint Expedition to Nippur, sponsored by the Oriental Institute of the University of Chicago and the Baghdad School, has resumed excavations in Iraq. Newsletters and reports from Mr. Richard C. Haines, Field Director and Annual Professor of the School, indicate spectacular results in the excavation of the Inanna temple. It was reported that the cost of excavating has increased considerably since the budget was set, that the Committee is considering plans whereby additional funds can be secured for the current season, and that another season may be necessary in order that the Inanna temple may be completely excavated.

It was voted, on the recommendation of the Baghdad School Committee:

1) to augment the support of the Nippur budget for 1960-61 season to the extent of $1,500, if the Oriental Institute agrees to appropriate the same amount.
2) to authorize the President to secure an option on the Oriental Institute's digging equipment comprising railroad and digging tools, if they should be placed on the market at the conclusion of the current season.
3) to authorize Director Crawford and Dr. George Dales, Fellow of the Baghdad School, to look at two or three prospective new sites where the School may work when the Nippur excavations have been concluded.

It was further reported that recommendations concerning future work at Nippur will be presented by the Committee at the next meeting of the Trustees.

It was voted to receive the report of the Baghdad School Committee.

Dr. Hanfmann, Director of the Sardis Expedition, reported on the third season. Lectures on the results of the latest season are being presented this week in Hartford, Conn., by Dr. Hanfmann, and in New York City by President Detweiler. A formal report is being prepared for publication. It was reported that the Bollingen Foundation has agreed to renew the grant for excavations at Sardis for another three years. It was voted to continue to sponsor the Sardis expedition for another three years on the same basis as during the past three years.

In the absence of Professor Albright, Chairman of the Special Committee on the Excavation of Nimrud Dagh, the President reported that the work on the publication is continuing.

In behalf of the Committee on Publications and in the absence of the Chairman, Dr. Albright, the President reported that the publications have continued to appear regularly, some delay being due to the fact that J. H. Furst Company has moved to new quarters. It was reported that Dr. Gus Van Beek has been appointed Editor of the *Annual* and that Dr. Ray Cleveland, as Associate Editor, has been working closely with Dr. Albright in the publication of the BULLETIN.

The report of the Nominating Committee was presented by Dr. Wilkinson.

Associate Trustee:
Professor Frank M. Cross, Jr., Harvard University

Officers:

President, A. Henry Detweiler
First Vice-President, W. F. Albright
Second Vice-President, E. A. Speiser
Secretary, Frank E. Brown
Executive Assistant to the President, William L. Reed
Treasurer, John W. Warrington
Assistant Treasurer, The Chase Manhattan Bank
Business Manager, G. R. Walton
Counsel, Pepper, Hamilton and Scheetz
Executive Committee, Carl H. Kraeling.

It was voted to accept the report of the Nominating Committee and to cast one ballot for the nominees.

Following a discussion of problems relating to the School in Jerusalem, the President announced that he was appointing the following as a Committee to consider the future of the Jerusalem School: Trustees Colt, Reynolds, Glueck, May and Wright, and former Directors Muilenburg, Skehan, Dentan, Richardson, Winnett, Pope and Reed (Chairman).

In behalf of the Evaluation Committee, Dr. Orlinsky suggested that some attention should be given to the possibility of increasing the size of the Board of Trustees. It was agreed that the President will appoint a committee to consider this matter, a report to be submitted at the next meeting of the Trustees.

It was voted to express appreciation to The Metropolitan Museum and to Messrs. Wilkinson and Crawford for the hospitality provided for the meeting.

It was voted to hold the next meeting on Saturday, April 8, 1961 at the Cornell Club, New York City.

The meeting adjourned at 4:55 p. m.

WILLIAM L. REED,
Secretary pro tem

ANNUAL MEETING OF THE CORPORATION

The annual meeting of the Corporation was held at Union Theological Seminary in New York City on Wednesday, December 28, 1960. The meeting was called to order at 5:00 p. m. by President A. Henry Detweiler. He welcomed new members of the Corporation, which include Central Baptist Theological Seminary, Wartburg Theological Seminary, Harding College, St. Thomas Seminary and Northern Baptist Theological Seminary. The roll of Corporation members was called and a quorum declared by the President. There were sixty-two institutions represented in person or by proxy. It was voted to approve the minutes of the Annual Meeting of December 29, 1959 as mimeographed and distributed.

President Detweiler reported that the annual reports of the Directors of the Jerusalem and the Baghdad Schools have been mimeographed and distributed, and that his own annual report will be published with them in the BULLETIN. For the current year the President reported excellent results of the Joint Excavation at Nippur and a full program of work at the Jerusalem School. As a result of a generous gift by Mr. and Mrs. Kenneth K. Bechtel, the Schools have been engaged in negotiations for the purchase of Dead Sea Scrolls from Cave 11. Problems pertaining to the renovation of the Jerusalem School property were outlined, and letters were invited from Corporation representatives who have visited the School and have some ideas as to the best way to plan for its future.

The report of the Evaluation Committee was presented by Professor Harry M. Orlinsky, Chairman. Other members of the Committee are Dr. Bernhard W. Anderson and Rev. Fr. Myles M. Bourke. It was reported that the problems relating to the transfer of the Assistant Treasurership from the Provident Trust Company of

Philadelphia to the Chase Manhattan Bank of New York City have been solved. In spite of some political uncertainties in the Near East, the Schools have carried on significant work and have participated in excavations at Sardis, Nippur, Bethel, Shechem and Gibeon during the past year. The Chairman noted with pleasure that there are about 120 Corporation member institutions. In this connection it was noted that the Charter limits the number of the Trustees and that there has been some discussion by the Trustees of the possibility and wisdom of increasing this number. He also noted that the Schools have a number of sets of slides available to members, but unfortunately some of them are out of date. It was urged that new sets be prepared, especially one dealing with archaeological discoveries and the Bible. The Committee expressed appreciation for the continued high quality of the Schools' publications and for the services of the officers.

Following a discussion of the need for new sets of slides, Dr. Richardson reported on the survey which he had completed, and the officers of the Schools stated that members of the Schools have agreed to revise the sets of slides dealing with Petra and the origin of the alphabet, and that plans for other visual aids have been made.

The President reported that the William Foxwell Albright Fund now stands at approximately $3,600. The Trustees have authorized the granting of the first Fellowship of this fund ($2,000) for study in the Near East for the academic year 1961-62.

The report of the Nominating Committee was presented by the Chairman, Dr. Harry M. Orlinsky, who stated that the other members were Robert J. Braidwood and Harold Ingholt. It was voted to accept the report and to elect the following:

TRUSTEES

H. Dunscombe Colt, *Esq.*, New York City	1961-63
Carl H. Kraeling, *Professor*, The University of Chicago	"
Oliver C. Reynolds, *Lawyer*, New York City	"

ASSOCIATE TRUSTEES

H. Neil Richardson, *Professor*, Boston University	1961-62
Frank Zimmerman, *Professor*, Dropsie College	"

NOMINATING COMMITTEE

Messrs. Bernhard W. Anderson, David N. Freedman, Patrick W. Skehan and George M. A. Hanfmann, Chairman

The President reported that nominations were open for one new member of the Evaluation Committee. James L. Jones of the Philadelphia Divinity School was elected to this position. Dr. Orlinsky observed that one member of the Evaluation Committee retires each year. Dr. Anderson will retire next year and will give the annual report of the Evaluation Committee.

The meeting was adjourned at 5:50 p. m.

WILLIAM L. REED,
Secretary pro tem

MEMBERS AND CONTRIBUTORS

INSTITUTIONAL CORPORATION MEMBERS

American Oriental Society—Prof. Herbert G. May
American University of Beirut—Executive Secretary Thomas E. Tellefsen
Anderson College & Theological Seminary—Dean Adam W. Miller
Andover Newton Theological Seminary—Prof. Russell C. Tuck
Andrews University (formerly Potomac U.)—Prof. Siegfried H. Horn
Archaeological Institute of America—Prof. Frank E. Brown
Asbury Theological Seminary—Prof. George A. Turner
Augustana Theological Seminary—Rev. Theodore N. Swanson
Australian Institute of Archaeology—Pres. Walter J. Beasley
Baldwin-Wallace College—Prof. John C. Trever
Bangor Theological Seminary—Pres. Frederick J. Whittaker
Berkeley Baptist Divinity School—Dean Ralph E. Knudsen
Berkeley Divinity School—Prof. R. L. Hicks
Bethany Biblical Seminary — Prof. David J. Wieand
Boston University School of Theology—Prof. H. Neil Richardson
Brigham Young University — Prof Sidney B. Sperry
Brown University—Prof. Ernest S. Frerichs
Candler School of Theology (Emory University)—Prof. Boone M. Bowen
Catholic University of America—Msgr. Patrick W. Skehan
Central Baptist Theological Seminary — Prof. Frederick E. Young
Central Conference of America Rabbis—Rabbi Leon J. Liebreich
Chicago Lutheran Theological Seminary—Prof. Robert J. Marshall
Christian Theological Seminary—Prof. David C. Pellett
Church Divinity School of the Pacific—Dean Sherman E. Johnson
Colgate-Rochester Divinity School—Prof. J. A. Sanders
College of the Bible (Lexington)—Prof. W. L. Reed
Columbia Theological Seminary—Prof. James H. Gailey, Jr.
Columbia University—Prof. Salo Baron
Concordia Theological Seminary—Prof. Alfred von Rohr Sauer
Cornell University—Prof. Isaac Rabinowitz
Covenant College & Theological Seminary—Dean James Oliver Buswell, Jr.
Crozer Theological Seminary—Prof. Jesse H. Brown
Drake University Divinity School—Prof. Charles L. Smith
Drew University Theological Seminary — Prof. Lawrence E. Toombs
Dropsie College—Prof. A. A. Neuman
Duke University—Prof. William F. Stinespring
Dumbarton Oaks Research Library—Prof. John S. Thacher
Eastern Baptist Theological Seminary — Prof. Edward R. Dalglish
Episcopal Theological School—Prof. Henry M. Shires
Episcopal Theological Seminary of the Southwest—Prof. John M. Holt
Evangelical Theological Seminary—Prof. F. W. Boelter
Fordham University—Rev. J. Franklin Ewing,
Fuller Theological Seminary — Prof. William S. LaSor
Garrett Biblical Institute—Prof. Edward P. Blair
General Theological Seminary—Prof. Robert C. Dentan
Golden Gate Baptist Theological Seminary—Prof. Kyle M. Yates
Grace Theological Seminary — Prof S. Herbert Bess
Hamma Divinity School—Dean E. E. Flack
Harding College—Dean W. B. West, Jr.
Hartford Seminary Foundation — Prof. Moses Bailey
Harvard University—Prof. Frank M. Cross
Haverford College—Prof. John W. Flight
Hebrew Union College—Pres. Nelson Glueck
Iliff School of Theology—Prof. Walter G. Williams
Jewish Institute of Religion—Prof. Harry M. Orlinsky
Jewish Theological Seminary of America—Prof. Robert Gordis
Johns Hopkins University—Prof. W. G. Lambert
Kenyon College—Prof. Oscar J. F. Seitz
Lancaster Theological Seminary—Prof. Donald M. C. Englert
Louisville Presbyterian Seminary—Prof. Arnold B. Rhodes
Lutheran Theological Seminary (Gettysburg)—Prof. Jacob M. Meyers
Lutheran Theological Seminary (Philadelphia)—Prof. John Reumann
Lycoming College—(to be Appointed)
McCormick Theological Seminary—Prof. Floyd V. Filson
McGill University—Prof. Stanley B. Frost
Metropolitan Museum of Art—Mr. Charles K. Wilkinson
Midwestern Baptist Theological Seminary—Prof. William H. Morton
Moravian College—Pres. Raymond S. Haupert
Mount Holyoke College—Prof. R. J. Tamblyn
Nazarene Theological Seminary—Prof Harvey E. Finley
New Brunswick Theological Seminary—Dr. Vernon H. Kooy
Northern Baptist Theological Seminary — Prof. Arnold C. Schultz
Northwest Christian College—Pres. Ross Griffeth
Northwestern Lutheran Theological Seminary—Prof. William H. Cooper
Oberlin Graduate School of Theology—Prof. Herbert G. May
Pacific School of Religion—Prof. Jack Finegan
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Phillips University Graduate Seminary—Prof. Loren Fisher
Pittsburgh Theological Seminary—Prof. David N. Freedman
Princeton Theological Seminary—Prof. Howard T. Kuist
Princeton University—Prof. T. Cuyler Young
Rosary College—Sister M. Aurelia, O. P., Pres.
San Francisco Theological Seminary—Dean Gurdon C. Oxtoby
Seabury-Western Theological Seminary — Dean Charles U. Harris
Smith College—Prof. Virginia Corwin
Society of Biblical Literature & Exegesis—Prof. G. Ernest Wright
Southeastern Baptist Theological Seminary—Prof. Marc H. Lovelace

Southern Baptist Theological Seminary—Prof. Joseph Callaway
Southern California School of Theology—Prof. Willis W. Fisher
Southern Methodist University (Perkins School of Theology)—Prof. Kermit Schoonover
Southwestern Baptist Theological Seminary—Prof. E. Leslie Carlson
St. John's Seminary—Msgr. Francis S. Rossiter
St. Joseph's Seminary—Rev. Myles M. Bourke
St. Mary's Seminary—Very Rev. Lloyd P. McDonald
St. Thomas Seminary (Colorado)—Rev. Bruce Vawter
Syracuse University—Prof. A. Leland Jamison
Texas Christian University—Prof. John Stewart
Union Theological Seminary (New York)—Prof. James Muilenburg
Union Theological Seminary in Virginia—Prof. John Bright
United Theological Seminary—Prof. G. W. Frey, Jr.
University of California—Prof. Walter J. Fischel
University of Chicago—Prof. Raymond A. Bowman
University of Cincinnati—Prof. William T. Semple
University of Dubuque Theological Seminary—Prof. Joseph L. Mihelic
University of Michigan—Prof. George G. Cameron
University of Notre Dame—Rev. Robert S. Pelton
University of Pennsylvania—Prof. E. A. Speiser
University of Toronto—Prof. F. V. Winnett
University of Wisconsin—Prof. Menahem Mansoor
Vanderbilt University—Prof. J. Philip Hyatt
Virginia Theological Seminary—Prof. M. L. Newman
Wake Forest College—Prof. Emmett Hamrick
Wartburg Theological Seminary—Prof. Horace D. Hummel
Wellesley College—Prof. Lucetta Mowry
Wesley Theological Seminary—Prof. Montgomery J. Shroyer
Western Theological Seminary (Michigan)—Prof. Lester J. Kuyper
Wheaton College (Illinois)—Prof. Joseph P. Free
Yale University—Prof. Harald Ingholt
Yeshiva University—Prof. Joshua Finkel
Zion Research Foundation—Miss A. Marguerite Smith

(Net Total 120)

INDIVIDUAL LIFE MEMBERS

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Prof. William T. Semple

PATRONS

Prof. W. F. Albright
Mr. Loomis Burrell
Mr. H. Dunscombe Colt, Jr.
Mr. John W. Warrington

THE THIRD CAMPAIGN AT SARDIS (1960)

GEORGE M. A. HANFMANN

The third campaign at Sardis was carried out between June 18 and September 12, 1960, with a labor force varying from 100 to 180 workmen. As during the first two seasons [1] the Fogg Art Museum (of Harvard University) and Cornell University cooperated in the project. The American Schools of Oriental Research continued to act as sponsor. These institutions were joined for the 1960 campaign by the Corning Museum of Glass, Corning, New York. The financial requirements of the campaign were met by the participating institutions, by the Bollingen Foundation of New York, and by a grant from the Corning Glass Works Foundation.[1a]

[1] On the campaigns of 1958 and 1959 cf. *Dergi* IX (1959), pp. 3-8; BULLETIN 154 (April 1959), pp. 5-35; 157 (February 1960), pp. 8-43. Add to the literature cited there, *ILN*, July 9, 1960, pp. 61-63, 18 figs.; M. Mellink, *AJA* 65 (1961), pp. 49-51, Pls. 26 f.; J. M. Cook, "Archaeological Reports," *JHS Suppl.* (1960), pp. 37 f., Figs. 10-14; Sherman E. Johnson, "Preliminary Epigraphic Report . . . 1958," BULLETIN 158 (April 1960), pp. 6-11; G. M. A. Hanfmann, *Sardis und Lydien*, = Akademie Mainz, *Abhandlungen* 1960: 6, p. 40, Fig. 24 (abbreviated *S. L.* in the following). The extra-budgetary cost of printing of the present report is being borne by the Expedition.

[1a] The expedition wishes to express its gratitude to the Board of the Foundation and to James Brown III, then Director of the Corning Glass Center. Yale & Towne

We are again indebted to the Ministry of Education of the Turkish Republic and to its Department of Antiquities for unfailing cooperation. As representative of the Department, Kemal Ziya Polatkan, Director of the Manisa Museum, was again our very effective Commissioner.

The campaign was directed by G. M. A. Hanfmann as Field Director and (in August) by A. H. Detweiler as Associate Director. Other members of the staff were: Drs. D. P. Hansen and G. F. Swift, Jr. (Oriental Institute, Chicago); Prof. M. Del Chiaro (Univ. of California); D. G. Mitten (Harvard), and C. H. Greenewalt, Jr. (Univ. of Pennsylvania), archaeologists; A. B. Casendino, C. F. Rogers II, R. A. Mayers (Cornell), and M. C. Bolgil (Harvard), architects; (Mrs.) I. Hanfmann (Fogg Museum), recorder; (Mrs.) C. Albright (Fogg Museum), and (Mrs.) C. Del Chiaro, assistant recorders; R. H. Whallon, Jr. (Harvard), anthropologist; W. C. B. Young (St. Paul's, Baltimore), conservator; G. Bakir (Univ. of Ankara), archaeologist and draftsman; Greenewalt and Whallon also acted as photographers. Dr. A. von Saldern, Corning Museum of Glass, came as specialist to make a study of ancient glass found in the campaigns of 1958-1960.[2]

This, the most comprehensive of the campaigns undertaken to date, saw work carried on at nine major locations (Fig. 1, AcT, AcN, Artemis, Tomb "k," Pc, Pn, HoB, B, CG). In addition, cleaning and restoration on a small scale were initiated at the Temple of Artemis and at the complex CG.

Lydian Levels and Stratigraphic Sounding South of the "House of Bronzes."

In the area of the "House of Bronzes" south of the excavations of 1958 and 1959[3] in grid squares S. 85-105, W. 5-E. 20 (for location, cf.

Manufacturing Company, the Thern Machine Company, and the Polaroid Company generously contributed to our work. The Fogg Museum is indebted to 210 Supporters of Sardis who provided the means to make the campaign a major one. A Ford truck and a Landrover were given by the same generous donor who had previously presented the other vehicles to the expedition through the Fogg Museum. In connection with the shipping of the Landrover from Pakistan, we are indebted to David Bell, then Secretary of the Graduate School of Public Administration, and to W. A. Mogensen and J. C. Eddison of the Harvard-Pakistan Advisory Group. The Sardis Fund of the American Schools received helpful special donations from O. von Kienbusch and Prof. and Mrs. A. H. Detweiler. A grant for field work in anthropology and ethnology was made to R. H. Whallon by the Milton Fund Committee on Small Grants, Harvard University. A renewed grant from the Harvard Foundation for Advanced Study and Research covered part of the expenses for research work on records at Cambridge, and enabled us to employ R. Clark Johnsen as student assistant under Faculty Aid Plan. B. Solomon, M. C. Bolgil, and, as volunteers, (Mrs.) I. Hanfmann, (Mrs.) C. Albright, (Mrs.) A. D. Moffett worked on photographs, drawings, and records of the 1960 campaign. Mrs. A. S. Denholm worked on ancient sources. S. Loomis continued her valuable services as Secretary to the project. At Ithaca, work on architectural records was carried forward by Charles F. Rogers II under the supervision of A. H. Detweiler.

[2] Dr. von Saldern's study will be published in a separate article.

[3] Cf. *Dergi* IX, pp. 17 ff., Figs. 20 ff.; Bulletin 154, pp. 22 ff., Figs. 8-15 and Bulletin 157, pp. 22 ff., Figs. 9-17, for the Early Byzantine "House of Bronzes" and the Lydian finds in its area.

Fig. 2; plan of Lydian levels, Fig. 3, by R. A. Mayers). Lydian levels were reached ca. 3.-3.5 m. below the surface, at levels of ca. 99.5,[4] and

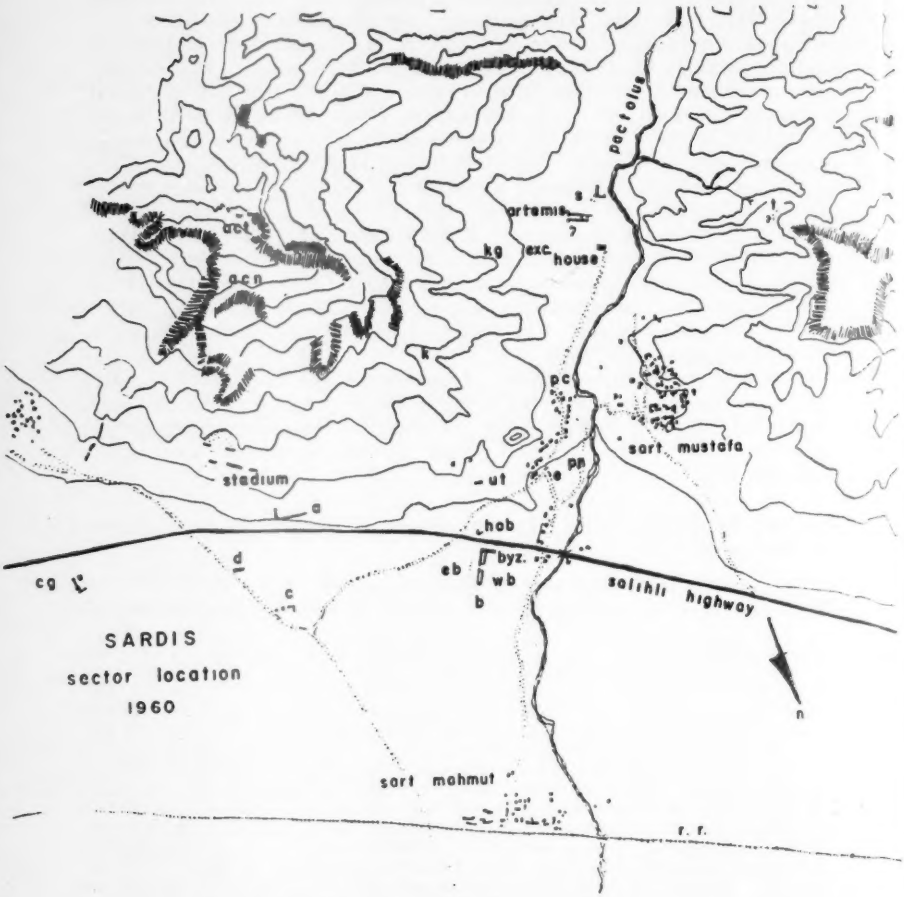

FIG. 1. Sardis, 1960. Sketch map with location of sectors.

exposed over an area of ca. 500 sqm. The trench was bounded on the east by a Roman structure (Fig. 2) of which ca. 100 sqm. were exposed.

[4] All levels of the "House of Bronzes" sector and of sectors "UT" and "B" adjoining it to south and north are based on an arbitrary datum of 100. placed in the northern apse of the north hall of Building "B". Cf. Fig. 2 and BULLETIN 154, p. 14.

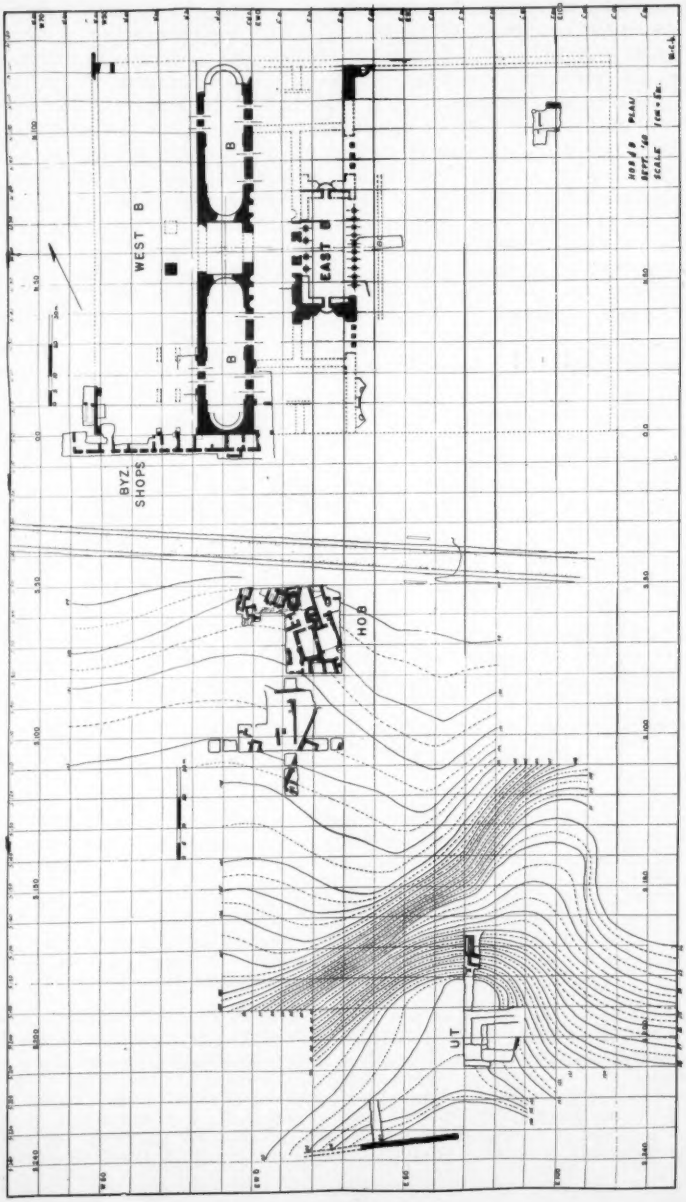

Fig. 2. Plan of Sectors UT, HoB, and PC.

Architectural features of the Lydian levels include a long wall running north-south for ca. 20 m. (E. 10-15, S. 87-103) and a number of small rectangular structures with foundation walls of river stones set in mud. Most of the walls and floors are disrupted. Only one room, ca. 3.5 by 3 m., is clearly recognizable (Fig. 3, W. 1-E. 3, S. 101-104). There were large accumulations of pottery in several places, and ten Lydian lamps were found piled on a piece of broken floor (E. 14, S. 97 in Fig. 3). These finds and the small size of the structures suggest that they may be shops, an interpretation which we have advanced for the "Lydian Shop" and other traces of Lydian walls found some fifty meters to the north in 1958 and 1959.[5]

Tentatively, we assume that the walls and floors exposed belong to two levels, an upper level at ca. 99.6-99.3, and a lower level at ca. 99.2-98.8. It seems probable that the occupation of the shops came to an end in 499 B. C. when the rebellious Ionians burned down the city. Part of an Attic black-figure cup found inside the wall of the preserved rectangular unit (Fig. 3, W. 1-E. 3, S. 101-104) and dating around 500 B. C.[6] would confirm this assumption. Whether the area was reoccupied in the fifth century is not as yet clear, since only mixed fill, predominantly Hellenistic and Roman, lies above the Lydian levels.

A lower level, ending perhaps around 600 B. C.,[7] was suggested by finds made in squares E. 0, S. 100; E. 10, S. 105; and E. 10, S. 100. From these, possibly "lower," floors came fragments of four Rhodian bird bowls, wildgoat ware, a Corinthian fragment of ca. 600 B. C., and a piece of a glazed Near Eastern alabastron, probably of the seventh century B. C.

In order to prospect lower strata, a pit (8 by 8 m. at top) was dug by Swift in grid squares S. 95-105, E. 4-14 (indicated by broken line in plan, Fig. 3; section, Fig. 4, by M. C. Bolgil). Between 99 and 98.1, according to Swift's report, foundation walls of Lydian type occurred in connection with floors. A heavily burnt floor at 97.65 ("Upper Burning" level, Fig. 4) may reflect the Cimmerian raid in the first half of the seventh century.[8]

[5] Cf. *Dergi* IX, pp. 18 f., Figs. 25-37 for a Lydian potter's shop and kiln, also BULLETIN 154, pp. 27 ff., Figs. 8-10, 14-15; and BULLETIN 157, pp. 30 f., Figs. 9, 15-17, for a Lydian room and two Lydian levels found west of the "House of Bronzes."

[6] Dr. D. von Bothmer kindly confirmed this dating.

[7] This lower level seems to correspond to the level of the "Lydian Shop" found in 1958. Cf. n. 5. It is not as yet clear whether the destruction of 547 B. C., which is attested in the Sector Pactolus North and possibly in Room 24, west of the "House of Bronzes" (BULLETIN 157, p. 30), can be discerned in the new area south of the "House of Bronzes."

[8] Destruction by Cimmerians is assumed for Gordion by R. S. Young, *AJA* 64 (1960), p. 243. A burnt layer at Miletus is attributed to a destruction by the Cimmerians by G. Kleiner; and J. M. Cook raises the question whether the same explanation might not apply to a destruction at Old Smyrna which he had previously explained as the result of an earthquake, cf. *Archaeol. Reports* (1960), p. 49. For Gordion, Young accepts the Eusebian date of 696 B. C. The destruction of Old Smyrna is placed at ca. 700 B. C. on archaeological grounds. Historical traditions (chiefly Assyrian) concerning Sardis, as interpreted by H. Kaletsch, *Historia* 7

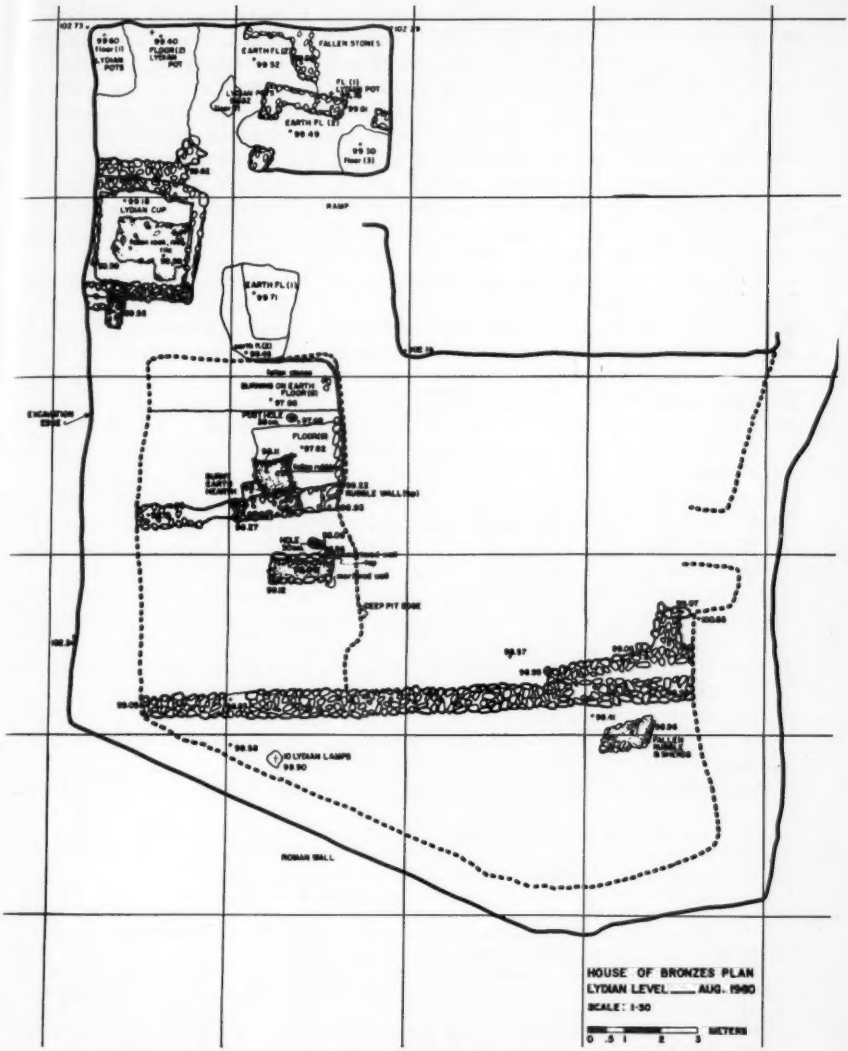

FIG. 3. Plan of Lydian levels and Deep Sounding, House of Bronzes Area.

This "Upper Burning" was preceded by a sequence of occupational levels separated by water-laid gravel beds. The levels are clearly indicated by clay and earth "floors" in which were embedded charcoal, bones, and potsherds (97.49; 96.97-96.45; 96.04; 95.68, in Fig. 4). Only the "Lower Burning" level yielded evidence of architectural remains, in the shape of strongly burned mud brick fragments. This "Lower Burning" level consists of clay and burned debris 0.5-0.8 m. deep. A floor sloping to 95.08 (Fig. 4) seals it on top. The lack of architectural remains in higher levels suggests that perhaps, like the Roman Forum, this was a convenient commercial area to which people returned again and again despite periodic inundations by the Pactolus.

A detailed discussion of stratigraphy would be premature, as we plan to enlarge the exposure of the lower levels in 1961. It is enough to say that in the lower strata the monochrome Anatolian wares constitute such a majority as to prove that all cultures hitherto traversed by the sounding were Anatolian. Painted Lydian pottery with Geometric and Protogeometric pattern,[9] abundant in the upper levels, virtually disappears at ca. 96 (96.04) level. Thick-walled, flat-based bowls of black ware and a buff and red slip ware appear in the "Lower Burning" level, as do coarse storage jars with ledge rims, thumb prints, and incised horizontal plastic bars. Isolated fragments of non-Greek painted wares, presumably of the Anatolian Bronze Age, occur in the "Lower Burning" level and beneath it.

The most remarkable ceramic fact is the small but consistent representation of wares of Greek character, the best preserved examples of which are shown in Fig. 5. A Greek Geometric sherd of the eighth century B. C. (Fig. 5, P. 60.598, brown slip and clay, black paint) definitely antedates the "Upper Burning."[10] Two Greek sherds (Fig. 5, P. 60.534, 60.546) were associated with the floor at 96.67 (Fig. 6). Two floors lower down, at 95.68, a jug shoulder with hand-drawn half-circles (Fig. 5, P. 60.561) may be either sub-Mycenaean or Mycenaean in style, though "native" in technique.[11] On the sloping floor on top of the "Lower Burning" (95.08, Fig. 4) was found a sherd from a small crater

(1958), pp. 46 f., indicate one attack by the Cimmerians around 668 B. C. and capture of Sardis in a second attack in 652 B. C. These dates are compatible with archaeological data obtained in 1960 at the Pactolus Cliff sector.

[9] Of the kind illustrated in *Dergi* IX, p. 18, Fig. 27 a; BULLETIN 154, pp. 28 f., Fig. 13, *S. L.*, p. 27, Fig. 11.

[10] Its decoration resembles *BSA* 53-54 (1950), p. 14, Pl. 5d, from Old Smyrna, dated by J. M. Cook to the first half of the eighth century B. C.

[11] Two joining sherds; probably pendent half-circles below lower band. Poor buff slip, reddish brown paint, very thin in half-circles. The half-circles are drawn free-hand in contrast to the compass-drawn circles of Lydian Geometric. Clay soft and could be Sardian. Similar debased Mycenaean ware seems to occur in Troy VII a (1275-1240 B. C.) and possibly in VII b (1240-1100 B. C.). Cf. C. Blegen, J. L. Caskey, C. H. Boulter, *Troy* IV (1958), pp. 23, 146 f., Figs. 242-248, 276-279. The half-circles *ibid.*, IV, pp. 46, 128, Fig. 248:10, classified as "imported III B." Cf. Furumark, *MP*, p. 343, Fig. 57, motive 43:13. If the parallel is valid, the 95.68 level at Sardis should be dated in the thirteenth century; but the half-circle pattern is known in twelfth century contexts, e. g. in recent excavations on Kephallonia, kindly brought to my attention by E. T. Vermeule.

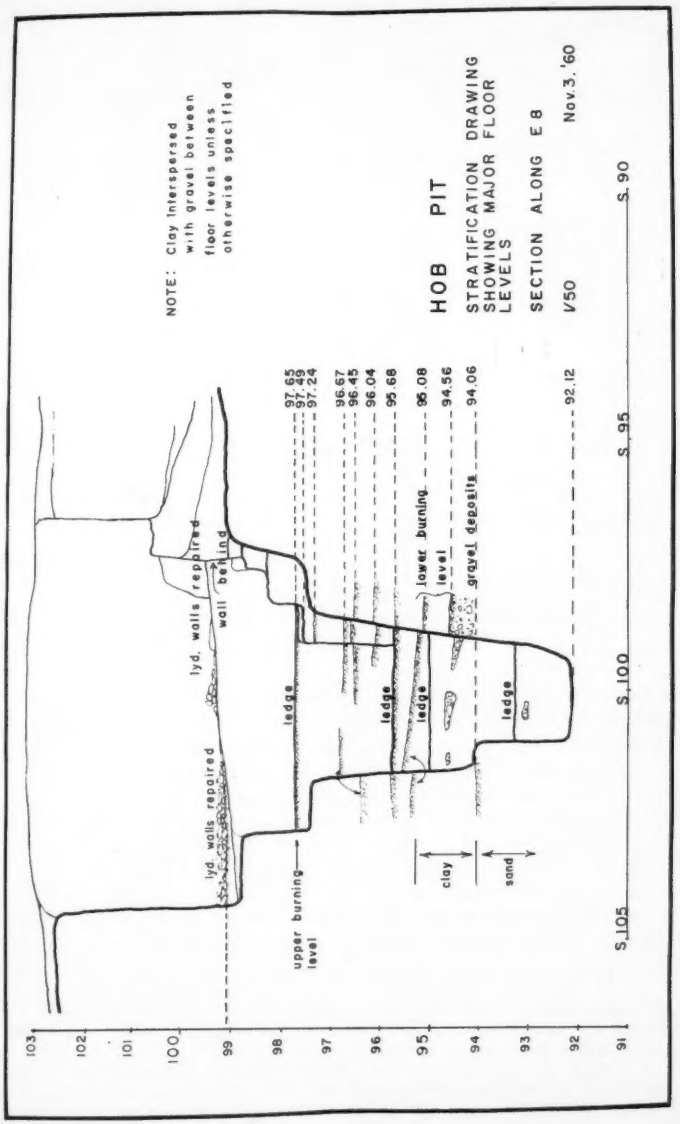

Fig. 4. Stratification of the sounding (Pit) in HoB Area.

or a large ledge-rimmed cup with vertical loop-handle stump. It seemed to be Mycenaean and, because of its greenish clay, specifically Rhodian (Fig. 5, P. 60.524).[12] From the lowest tangible traces of occupation (ca. 94.93.8) in a sand deposit definitely below the last remnants of the "Lower Burning," comes a jug handle in red glaze on buff which seems to be of good Mycenaean mainland fabric (Fig. 5, P. 60.535).[13]

At the bottom, from 93.8-92. (Fig. 4) the pit ran into a deposit of sand which yielded only isolated sherds and bones. Since water-laid

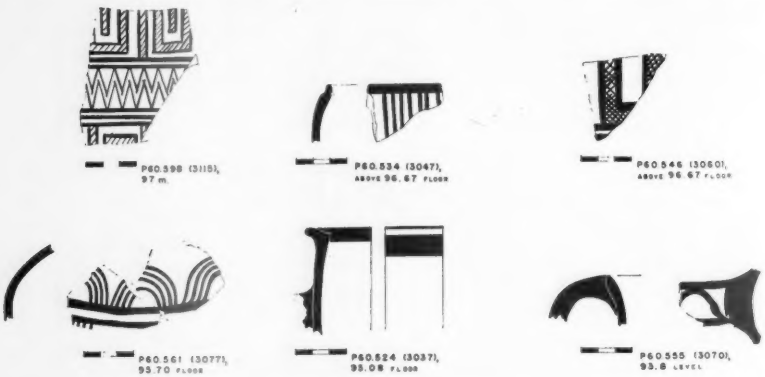

FIG. 5. Sherds from the sounding in HoB Area. Top: Geometric; bottom: sub-Mycenaean(?) and Mycenaean.

deposits often intervene between occupational strata at Sardis, it remains uncertain whether we have reached the earliest remains of human habitation in this area.

The prospect of a continuous sequence ranging from ca. 500 B. C. to possibly as early as 1300 B. C. is of great importance for the history of Western Asia Minor. The "Lower Burning" level, in particular, raises interesting questions, but more material must be secured before we can judge whether this destruction should be associated with the arrival of the dynasty of the Heraclidae (Herodotus IV, 45), ca. 1200 B. C., with Greek captains returning home from the Trojan War (ca. 1240 B. C.), or with the Hittite attack upon Assuwa under Tudhaliyas IV (1250-1220 B. C.).[14]

[12] Dm. (int.) 0.22 m. Red band inside under rim, red rim, red at handle stump. At least a half-dozen less distinctive fragments (bands, black glaze, red glaze) of Mycenaean make came from the same level.

[13] Cf. *Troy* III (1953), Figs. 419:18, "from earthquake stratum," i. e. 1325-1275 B. C., and *Troy* IV (1958), p. 103, Fig. 247:3, 1275-1240 B. C.

[14] On Post-Trojan wanderers like Moksos-Mopsus cf. *HSCP* 63 (1958), pp. 72 ff. For the campaign of Tudhaliyas IV and the possibility that Assuwa was in Lydia, most recently G. L. Huxley, *Achaeans and Hittites* (1960), p. 33.

Roman Building and Graves South of the "House of Bronzes"

Some interesting finds were made in the mixed Hellenistic and Roman fill which overlay the Lydian strata. A full-cast bronze ear of an equid was found at E. 1,45, S. 103, ca. 1½ meters below surface (101.). It is life size (H. 0.125 m.) and gilded on the surface. It must have come from a large group of bronze statuary of the first or second century A. D.[15] A flat oval gem of jasper, probably of Late Roman times, is inscribed on both sides with so-called "sacred writing."[16]

South and east of the "House of Bronzes," walls of a large Roman building have begun to emerge (in squares E. 10-30, S. 90-120, Fig. 2). The original walls are of good mortared rubble with string courses of brick. The long western wall of the building has been exposed for 28.5 m. south of its northwest corner. It is 1.2 m. thick and is preserved to a height of ca. 3 m. Its top was intentionally "shaved." Parts of several rooms adjoining the wall on the east have been cleared. Their floors are at levels higher than that of the original floor (which can be placed at ca. 100. from the position of the footing of the long west wall). In square E. 20, S. 110, a grave made of irregular stones and covered with stone slabs was sunk ca. 0.4 m. below the late floor. The burial contained one complete skeleton and parts of another. Four skulls and parts of skeletons were found lying on top of the grave under the debris representing the collapse of the structure. According to R. Whallon, three of the skulls were those of male adults, aged 20-40 years. While (Early?) Byzantine re-use is certain, the history and function of the building are yet to be unravelled. For the present it must suffice to note that the orientation of this Roman structure differs from that of the Early Byzantine "House of Bronzes."

Pactolus Cliff.

In this sector on the eastern bank of the Pactolus (Pc in Fig. 1), Del Chiaro enlarged the area of the excavation[17] to ca. 200 sqm. Along the eastern edge of the trench, at a level of 92.7[18] there came to light part of a room with a mosaic floor in several colors, probably of the fourth century A. D. The building complex to which the room belongs may be either Late Roman or Early Byzantine. Rebuilding later than the mosaic is shown by the fact that the west wall of this room cuts into the mosaic.

Below this level, at ca. 91.5 in the eastern part of the trench, there were found six Roman graves built of tiles, covered with stone slabs,

[15] For the gilding, cf. the fragment of a horsehead in the Walters Art Gallery, D. K. Hill, *Cat. Class. Bronze Sculpt.* (1949), p. xviii, No. 10 a, Pl. 4.

[16] Found near the wall of the Roman building but only 0.3 m. below surface. L. 0.025 m. "Omega Alpha—Alpha Omega" is the only reasonably intelligible part. It is, however, perfectly clear that this is an example of the "syncretistic" amulets. I am grateful to A. D. Nock for preliminary discussion of the piece.

[17] For the 1959 campaign, cf. Bulletin 157, pp. 12 ff., esp. the plan in Fig. 3.

[18] The arbitrary datum of 100. used in the system of levels at Pactolus Cliff and Pactolus North equates 100. with Butler's zero datum at the Artemis Temple, which is actually a. s. l. 138.38. Cf. *Sardis* 2, p. 18 and Bulletin 157, p. 16, n. 10.

and orientated north-south. They lay directly east and northeast of the Roman chamber tombs discovered in 1959. The new tile graves belong to the first and second century A. D. Tomb D yielded interesting terra-cottas (Fig. 6);[19] Tomb A, a much defaced "local Lydian" coin of the second century A. D.

After appropriate recording, the Roman chamber tombs LVC and

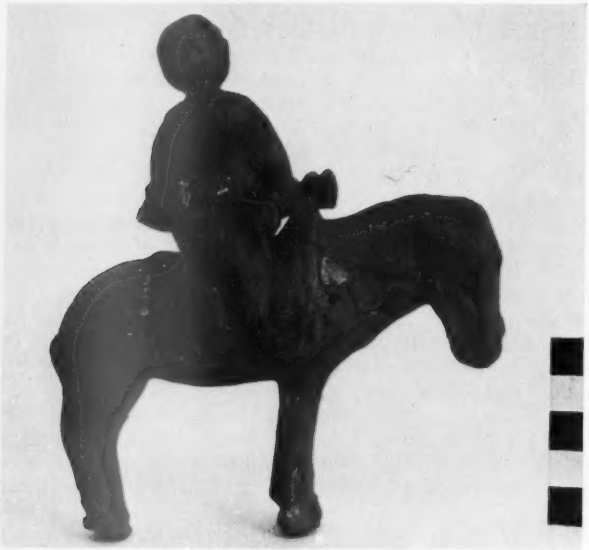

FIG. 6. Terracotta figurine from Tomb 1960 D, Pactolus Cliff.

SVC and the Hellenistic "Tomb of the Lintel" were taken down. The second chamber of the "Tomb of the Lintel," the door of which we had exposed in 1959, turned out to have been completely destroyed by Roman builders.[20]

These removals paved the way for recovery of four Lydian strata.[21] Whether levels of the Persian era (fifth and fourth century B. C.) had

[19] T.60.25. H., 0.132 m. Tomb D also contained an attractive terracotta of Venus. Many lamps and a glass vase confirm the dating. Two skeletons, man and wife, were found in Tomb A.

[20] Cf. BULLETIN 157, p. 16, Figs. 3 and 5.

[21] Marked I, II, III, IV? in Fig. 7. For the first appearance of Lydian walls in 1959 cf. BULLETIN 157, pp. 18 f., Figs. 3, 7. It should be noted that walls "A" and "B," which have retained their designations from 1959 in Fig. 7, emerge as belonging to Level III, while wall "C" of 1959 is the east wall of the structure of Level II. The conflagration at 89.8 level, mentioned in BULLETIN 157, p. 18, as possibly relating to 499 B. C., must be earlier, probably signifying the end of Level II. It reappears in the eastern cut of the trench at ca. 89.7.

existed must remain uncertain. Some objects of this period [22] were found in unstratified locations, but disturbance by Hellenistic and Roman construction has left no tangible structural remains.

The top Lydian level (I, in plan Fig. 7, by C. F. Rogers) is represented by a wall running east-west between Zone 1 and Zone 2A in the northern part of the trench (top 90.75, base 90.1 varying to 89.1). It had been re-used as foundation for the dromos of the Hellenistic "Tomb of the Lintel." We assume that this period ended ca. 500 B. C. A continuous deposit with carbonized matter at ca. 91.1 may possibly be linked with the destruction of Sardis by the Ionians in 499 B. C. Level II, which is perhaps no more than an architectural phase of one building, includes a well-laid floor and the rear (north and bit of east walls) of a rectangular building in Zone 3 (Fig. 7, floor at 89.5).

A thick layer of collapsed mud (*pisé*) and carbonized matter (ca. 89.5-89.) indicates that the large structures of Level III perished in a violent destruction. The base of the long wall of Level I, which crosses a double wall of Level III, is separated from the tops of the walls of Level III by this deposit. In general, foundations of the walls of Level III reach to ca. 88.

Beginning in the north, an east-west wall runs into the north side of the trench. It is peculiar in that a lower wall of small stones (88.-88.5) is topped by a level of mud, ca. 20 cms. thick, and this in turn by a second stone wall (88.7-88.9). The next east-west wall (Wall "A," center of trench, Fig. 7) is joined at an obtuse angle by a double wall "B" which also disappears under the northern embankment of the trench. A paved area in the northeast corner (88.4) belongs to this complex. From the eastern base of wall "B," rows of large river stones descend in step-like lines to ca. 88. They may have fallen from wall "B," but in any case indicate that a slope eastward existed below the base of "B." A curving line of large stones running east from the southeast corner of walls "A"-"B" is suspected by Del Chiaro of representing part of a circular building, but this seems uncertain.

A third east-west wall was uncovered in the southern part of the trench. A door (base at ca. 89 m.) was blocked up. It is possible that this wall, which reaches up to 90.5 in its eastern part, was rebuilt after destruction.

The western parts of all structures were destroyed by the Pactolus. Since all of the major walls with preserved lengths of 6 and 7 m. continue into unexcavated ground, the buildings must have been of considerable size, quite different from the small shops of the "House of Bronzes" area. It seems reasonable to surmise that they were public or sacral structures, especially as fragments of architectural terra-cotta revetments have come to light.[23] No one unit is complete, and the only plausible

[22] Notably a terracotta antefix of the fifth or fourth century B. C., T. 60.9, from perturbed area in Zone 3, and the squat lekythos BULLETIN 157, p. 18, n. 12.

[23] Fig. 8, T. 60.2, a painted covering tile T. 60.4, and raised edge tile T. 60.38 come from Level I, but earlier pieces are attested by the surface find of a relief with a sphinx, early sixth century, and a tile fragment, T. 60.10, from Level III.

interpretation seems to be that an east-west street ran between the southernmost long wall and wall "A" (Fig. 7, Zone 4).

A diagonal cut (marked with broken lines in Fig. 7) was taken down to the water level of the Pactolus (84.65). Its stratification is shown in the lower left part of Fig. 7. Finds continued to a seepage level at 87.15. The gravel and clay strata produced no artifacts.

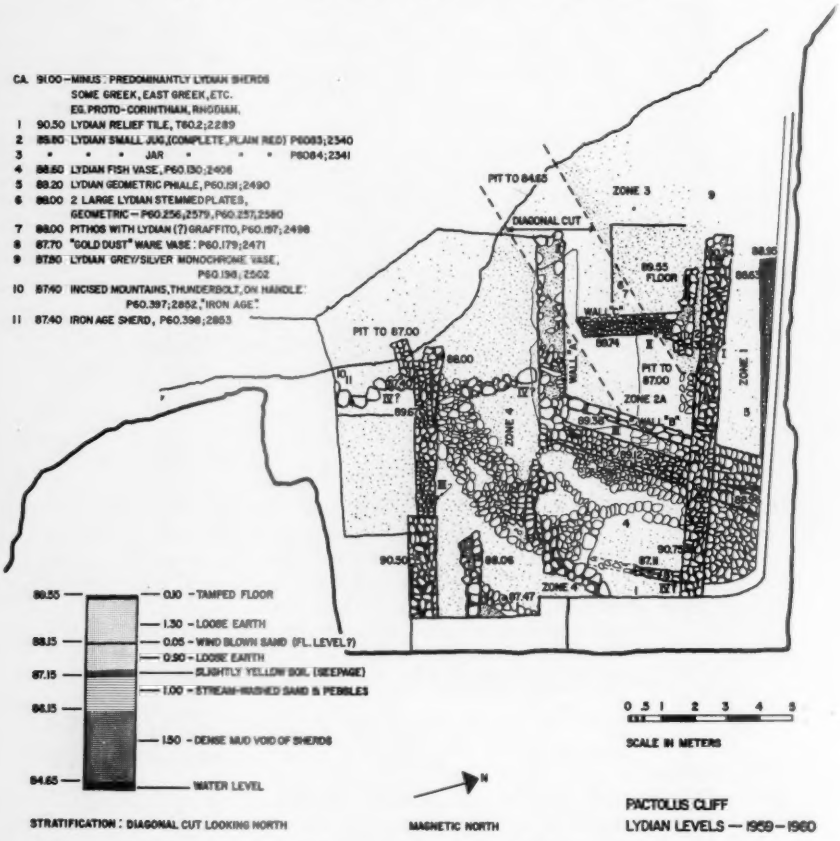

FIG. 7. Plan of Lydian levels in Sector PC.

Clear proof for the existence of a fourth level (marked IV? in Fig. 7) came from the northeast corner of the trench. Here a short wall running north-south came to light at 87.1, separated by a half-meter of earth from walls of Level III. A line of boulders running north-south in the southwest part of the trench (top 87.4, bottom 87) must probably be

assigned to the same level, but because of its location close to the bank of the torrent, stratification of objects was less reliable.

Finds from Level I included terracotta revetments of the late sixth century (Fig. 8, H. 0.18 m.)[24] as well as Lydian sherds of the red-glazed, white-banded, " streaked," and pendant hook varieties.

FIG. 8. Lydian terracotta revetment. Level I, Sector PC.

A charred clay level at 89.7 cannot yet be dated, but may be connected with the end of Level II. Rich ceramic evidence is available for the dating of the burned clay floor of Level II and of the destruction which preceded it. On the floor were found fragments of a Protocorinthian linear kotyle and a nearly complete local imitation of the same shape (P 60.67, 60.66), as well as the latest examples of Lydian Geometric Black on Red ware (P. 60.68). Immediately below the floor were

[24] T.60.2, H., 0.18 m. For the type cf. *Sardis* 10 (1932), pp. 14 f., Nos. 16-20, Figs. 18-20, and the simplified version at Gordion, *Univ. Mus. Bulletin*, 16:1 (May, 1951), p. 7, Pl. 3:2, said to be of the fourth or third century B. C. Cf. also L. Kjellberg, *Larisa* 2 (1940), Pl. 37.

the fragments of a Middle or Late Protocorinthian jug (P. 60.80), of a Rhodian jug with interlaced pattern,[25] and of a fine bichrome Eastern Greek Orientalizing (Ephesian?) plate.[26] The last two pieces date from the second quarter of the seventh century. From another location in the same destruction level (Zone 2, 89 m.) come fragments of a Protocorinthian kotyle (Fig. 9) datable to the late eighth or early seventh century B. C.[27]

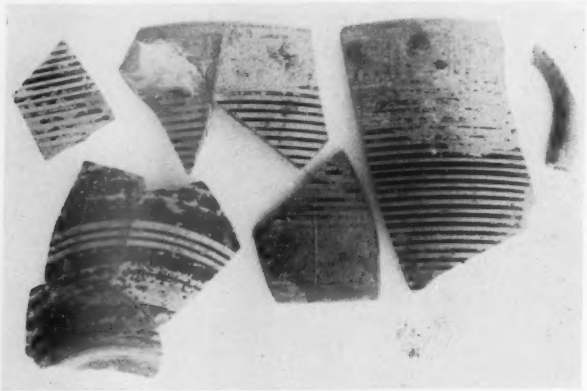

FIG. 9. Fragments of Protocorinthian *kotyle*. Destruction fill between Levels II and III, Sector PC.

Two facts emerge as certain. The clay floor of Level II can have had only a short duration; and the destruction of Level III, dated in broadest terms, must fall within the first half of the seventh century. It is highly probable that this destruction must be linked with the Cimmerian raids, for which we seem also to have evidence in the "House of Bronzes" area.

Detailed interpretation is more difficult. At Gordion, R. S. Young has accepted the Eusebian date of 696 B. C. for the Cimmerian assault.

[25] P. 60.8 + 100. For this pattern and the shoulder rays cf. W. Schiering, *Werkstätten orientalisierender Keramik auf Rhodos* (1957), pp. 8 f., Pls. 3:2, 4 f., who dates these ca. 650 B. C. Evidence from Tarsus (to appear in *Tarsus III*) calls for a slightly higher date. Cf. also Chr. Kardara, *AJA* 59 (1955), p. 52, for a date about 660 B. C.

[26] P. 60.149, for the shape cf. Schiering, *op. cit.*, pp. 34 f., for ornaments, Figs. 6:4 and 9:7, also checker board. The bright colors and general quality are reminiscent of the fragments from Artemisium in Ephesus. Cf. D. Hogarth, *The Archaic Artemisia* (1908), p. 228, Figs. 54 f., and Pl. 49:2, 5. The Sardis piece is illustrated in *Archaeology* 14, p. 8, Fig. 8.

[27] P. 60.107, H. of top fragment, 0.045 m. Cf. J. K. Anderson, *BSA* 53-54 (1960), pp. 140 f., Pl. 21:16-23, from floors of abandoned "curved" buildings at Old Smyrna. The catastrophe was originally placed by J. M. Cook, *ibid.*, around 700 B. C., but he noted that the *terminus ante* were tombs sunk into the edge of the city in the second quarter of the seventh century. He now considers the possibility of a Cimmerian attack, *Archaeol. Reports JHS Suppl.* (1960), p. 49.

For Sardis, however, H. Kaletsch in a closely reasoned argument seeking to reconcile Assyrian and Greek traditions, suggests three attacks, the first in 668 B. C. or slightly earlier, the second in 652 B. C. (death of Gyges), and the third, in the seventh year of king Ardys, when the Treres conquered Sardis, in 645 B. C.[28] The destruction of Old Smyrna seems to coincide with the destruction of Level III in Sardis, as the abandoned "curved" houses have yielded virtually identical Greek material.

With the data available, it is impossible to decide whether Level III at Sardis was destroyed in ca. 670 or in 652 B. C. or both. It is tempting to see in the clay floor of Level II, with its surprisingly short life, a structure built after the Cimmerian attack(s) and destroyed by the Treres in 645 B. C.

Level III had sub-levels, at the very least two, in some places perhaps as many as four. Its final phase is documented not only by datable pieces from the destruction fill but also by imported pieces of Greek Geometric wares.[29] Lydian painted wares with Geometric and Proto-geometric decoration (Fig. 12) are characteristic of this phase.[30] Grey monochrome wares increase in prominence in the earlier part of the period. Large pithoi from the lower part of the level display curious signs incised below the rim. While some of these can be readily explained as ornaments (star, cross) or "potters' marks," the sequence of two different signs on one fragment (Fig. 10, from 88 m.) and the peculiar arrow sign on another (Fig. 11, same level) pose the question whether these signs may not represent a hitherto unknown system of writing.

The end of Level III may be placed between 670 and 650 B. C. Its beginning cannot at present be determined. At the narrowest estimate, it might be compressed between 750 and 670, but it appears to have been of fairly long duration, and even 900 B. C. may not be out of the question.

The only safe *locus* of Level IV (in the northeast corner) yielded virtually only grey monochrome. From the long row of boulders near the west edge of the trench, where disturbance was easily possible, came

[28] *Historia* 7:1 (1958), pp. 25 ff. Cf. n. 7, *supra*.

[29] P. 60.159, in "Diagonal Cut", 88.5; according to my notes mainland or island ware. Wavy metopal patterns were popular in Eastern Greece in the eighth and early seventh century, cf. K. Friis-Johansen, *Exochi* (1957), p. 90, Figs. 10, 36, 101, 115. Rhodian Geometric of the eighth century with "butterfly" and crossed metopal pattern was found in Zone 1 at 88.4 and in southern part of the trench "beneath LVC" at 88. Out of eleven fragments of Rhodian bird bowls catalogued from Pc, three go with Level II, all others with Level III. As Rhodian bowls were in use ca. 725-625 B. C., this confirms that the dividing line between the two levels comes in the first half of the seventh century. On the dating of Rhodian bird bowls, cf. *Aegean and Near East, Studies H. Goldman* (1956), pp. 175 f.

[30] P. 60.191, ledge-rimmed plate, Black-on-Red, 88.2, lower part of Level III. Cf. *S. L.*, Fig. 11. For finds of the same phase in the "House of Bronzes" cf. BULLETIN 154, pp. 28 f., with Fig. 13, from the Temple of Artemis area. The results of 1960 make it clear that the earlier phase of Lydian Geometric (half-circles, wavy and cross-hatched metopes) flourished in the eighth century (and earlier?). They tend to confirm the sequence forecast in *Studies D. M. Robinson* 1 (1951), p. 175.

two monochrome sherds of Bronze Age character and four painted sherds, three of which were quite different from standard Lydian Geometric and displayed some relations to Phrygian painted wares.[31] Because the Phrygians may have exercised overlordship over Lydia, the matter

FIG. 10. Fragments of pithos rim with two incised signs. Level III, Sector PC.

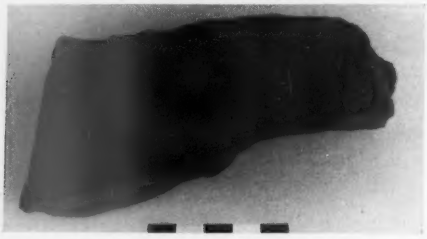

FIG. 11. Fragment of pithos rim with "arrow sign." Level III, Sector PC.

deserves to be noted. It would be unsafe to base any dating on three sherds. All we can say at present is that apparently no signs of habitations earlier than Level IV existed in this location.[32]

PACTOLUS NORTH.

A new sector was opened by Del Chiaro on August 1 and designated "Pactolus North" (Pn, Fig. 1). It lies on the east bank of the Pactolus midway between the highway bridge and the sector "Pactolus Cliff."

[31] Monochrome: P. 60.397, band handle with incised triangles and wave (mountains and thunderbolt); flat lug handle. P. 60.464, panel of red and black lozenges, diagonally hatched meander, may be authentic Phrygian, cf. *AJA* 60 (1956), p. 263, Fig. 48; and 64 (1960), Pl. 58:22. Cross-stroked meander and hatched triangles seem to attest contact with Phyrgia for the jar rim, P. 60.408, and the "pictorial" checker board for the crater rim P. 60.409, cf. E. Akurgal, *Phrygische Kunst* (1955), pp. 10 ff., Fig. 18, Pl. 9 A (meander) and pp. 16 ff., Fig. 41 (checker board).

[32] As matters stand, it seems that the city had expanded at some time during the early Iron Age; whether this occurred early enough to be connected with the tradition that Sardis was "founded" after the Trojan War must remain an open question.

Here in 1954 was discovered an archaic torso built into a Roman wall.[33] The trench measured ca. 23 m. north-south by 12 m. east-west for an area of ca. 270 sqm. The same system of levels was used as for the sector " Pactolus Cliff." Almost immediately under the surface (91.7-92.) there appeared the walls of a Late Roman complex which had undergone rebuilding in Byzantine times. Four rooms (A-D) and a paved area were exposed. The major Late Roman phase featured mosaic floors with ornamental designs in five colors. A few fragments of these were pre-

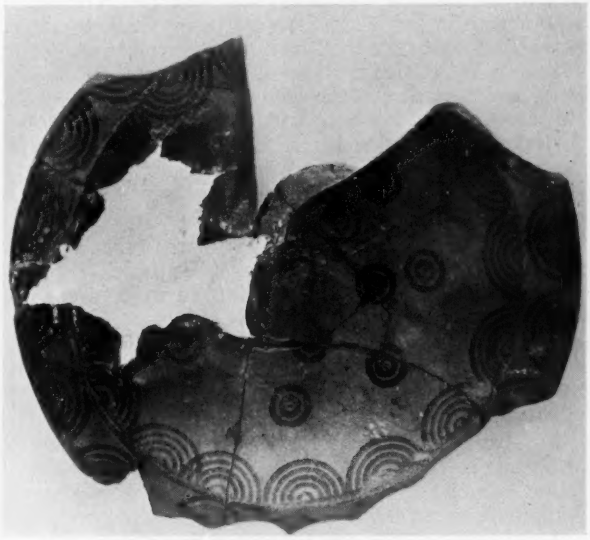

Fig. 12. Lydian Black-on-Red plate with Protogeometric decoration. Level III, Sector PC.

served in Room B and a nearly complete pavement covered the northern part of Room C. To the south an elaborate system of water drains was exposed. Two Byzantine graves built of tiles and covered with stone slabs (some re-used) were found; one was that of a child, the other of a teen-age girl. They yielded no datable material.

Coins found in a drain and in the building indicate that the water supply and drainage existed in the second half of the fourth century A. D. and provide a date shortly after 400 A. D. for the mosaic; [34] 400

[33] Published by G. M. A. Hanfmann and K. Z. Polatkan, *Anatolia*, 4 (1959), pp. 55 ff., Pls. 9-10.

[34] A coin of Constantius II and Gallus was lying against a large drain and another coin (illegible) of the fourth century was found in the drain. No coins were found on the mosaic floor, but those found in the unpaved part of Room C belonged to Gratian (A. D. 378-383) and Arcadius (A. D. 395-408); below mosaic level in Room B, Eudoxia or Theodosius II (A. D. 400-402).

A. D. had been suggested by E. Kitzinger on stylistic grounds. That the unit may have remained in use into the Middle Byzantine period is indicated by occurrence of Middle Byzantine glazed wares in the fill found within the structures.

Built into the Roman wall between Rooms B and C was a Hellenistic columnar base (" top " at 90.2, lying on its side). It bears a representation of the mountain god Tmolus and the inscription *Phyles Tmolidos*.[35]

In this sector, the builders constantly re-used walls of earlier periods as foundations. The situation may be illustrated with reference to " Wall Stratification " seen in Fig. 13, right (drawn by C. F. Rogers). " View A " shows the southeast corner of the buildings seen in the plan. Roman mortared rubble with " lacing " brick course reached from 90.58 to 89.66; the Roman part sits on the Hellenistic rubble wall (89.66-88.44); and this in turn on the " Perso-Lydian " wall built of flat stones (88.44-86.84). A similar stratification of walls is seen in the photograph Fig. 14, taken from the west. The high wall in the center, shown in black on the plan (Fig. 13) may belong either to the fourth century B. C.[36] or to the Hellenistic phase.

Toward the end of the campaign this wall was taken down to permit unimpeded excavation of the two remarkable apsidal structures of the Persian era (seen in the plan Fig. 13 and, from west, in the photograph Fig. 14). The base of the northern structure is at 87.42, that of the southern at 86.8. They are separated by a corridor or lane 1.30 m. wide. Remains of a rectangular terracotta and stone drain (seen in Fig. 14, center) and the location of an outlet in the northern of the two walls[37] prove that at one time this lane had a level at ca. 88 m.

Above this street level and within the apsidal structures (ca. 88.1-3) a layer of burned matter may be tentatively considered evidence of the Ionian destruction of Sardis in 499 B. C. Apparently the interior of the Persian building was burned but its stone walls were not destroyed. It was rebuilt and continued to function through the fourth century B. C.

The walls of the Persian structure were built into a deep layer of burnt brick and carbonized matter which in some places reached the thickness of nearly one meter (87.5-86.5). This layer evidently represents buildings destroyed by the Persians in 547 B. C. and subsequently leveled. The beautiful fragment of a painted architectural terracotta relief which shows a bearded Lydian wearing earrings and clad in a purple chiton (Fig. 15) was found in this leveled fill under the southern

[35] Cf. *Sardis* 7:1 (1932), p. 55, no. 34, an inscription copied in 1671 by Thomas Smith, cylindrical pedestal then on the Acropolis, *phyle Tymolis* (sic) *eteimesen ek ton idiōn Tiberion*.

[36] A thick-walled piece of Attic black glaze, of the fifth or fourth century B. C., was found *within* the wall when it was being taken down. This, of course, provides only a *terminus post quem*.

[37] This outlet is located in the continuation of the northern apsidal wall toward the west, which was found on the last day of the excavation and is not shown in Plan Fig. 13. Actually, it implies the existence of two street levels, one at ca. 88. and another at ca. 88.3. Indications are that for 1.1 meter above base the apsidal walls were foundation walls below street level.

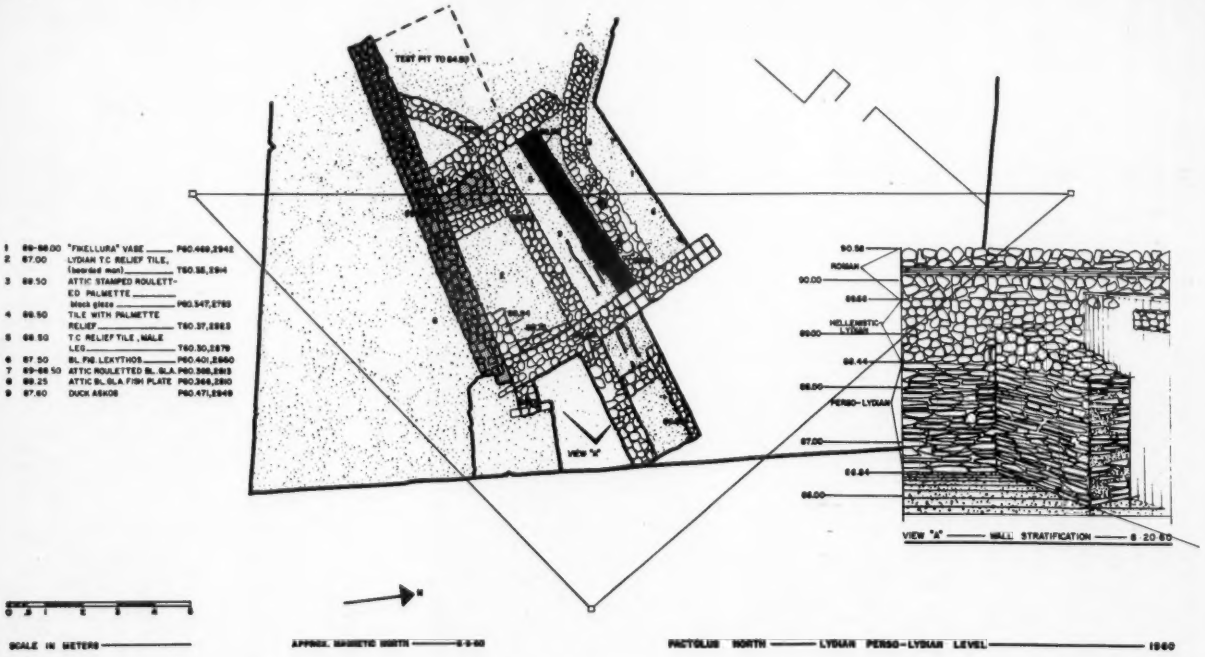

FIG. 13. Plan of Persian, Lydian (dark), and Hellenistic (black) walls; View A of southeast corner. Sector PN.

room (No. 2 in Fig. 13).[38] The earliest sherds found in this debris were Rhodian wild goat and bird bowls of the seventh century,[39] material which corresponds in part to Level II at "Pc" and the "seventh century Lydian level" at the "House of Bronzes."

A sounding made at the southwest corner ("Test Pit," Fig. 13) traversed a sterile layer of sand and gravel to reach in the lowest meter (85.5-84.5) a stratum with Lydian Geometric painted and monochrome sherds similar to those from Level III at Pactolus Cliff.

Finds important for dating the Persian level above the destruction

FIG. 14. Persian Apsidal Structures from the west. In the center, Hellenistic wall. In the background, Hellenistic and Roman walls. Sector PN.

of 499 B. C. included Attic stamped palmette and rouletted ware and a palmette antefix of Classical type (found at locations 3, 7, and 4, in Fig. 13). Two worn bronze coins of the fourth century B. C. were tentatively identified as Ephesian.[40] Below the destruction level of 499 B. C. and above that of 547 B. C. were the fragments of a Fikellura

[38] Other terracotta fragments include a relief fragment with the leg of a male figure, T. 60.30. The Persian builders also incorporated one fragment of a Lydian stone wall within the southern structure (shown in darker color between two north-south walls in plan Fig. 13).

[39] P. 60.387, P. 60.446. Particularly interesting is P. 60.388, fragment with a ship's prow shaped like a boar's head, cf. *HSCP* 61 (1953), Fig. 10b, from Dadia (Knidos). Rhodian bird bowl, P. 60.447, cf. n. 29, *supra*.

[40] C. 60.118, 119, in the lane and in the northern structure, 88.25, with pottery of the Persian era.

vase (Fig. 16), part of an Attic black figure lekythos, and a duck askos [41] (found at locations 1, 6 and 9, in Fig. 13).

The double-apsed structure is the first important building of the Achaemenid era to be discovered in the city. Unfortunately, the apsidal parts have been eroded by the river, but even so its walls, preserved to a height of nearly two meters, are impressive and show a technique distinctly different from that of the Lydian structures.

FIG. 15. Painted Lydian terracotta Relief Fragment. Sector PN.

THE TEMPLE OF ARTEMIS.

From July 14 to 22 and early in August, W. C. B. Young and Mehmet C. Bolgil undertook to clean the eastern cella and investigate the image base. The northeast corner, still covered with earth, was excavated, two blocks of the northern cella wall put in place, and stones left by the First Sardis expedition put in order. Since we intend to set in place all sandstone blocks of the image base, it seemed advisable to make a sounding first. Accordingly, a pit ca. 4 m. deep (Butler's levels + 1. m. to — 3 m.) was dug in four steps, south of the column piers 69 and 71 [42] (length 10 m. east-west, width 4 m. north-south). The results may be

[41] P. 60.469, 401, 471. H. of Fikellura fragment, 0.195 m.
[42] For plan and numbering of piers cf. *Sardis* 2 (1925), p. 42, and *Atlas*, Plan 1.

summarized as follows. Prior to the construction of the Hellenistic temple the area was traversed by torrents which carried sherds of the sixth and fifth centuries (levels — 0.5 to — 2. m.).[43] The builders of the Hellenistic temple placed their piers directly on the riverine deposits and filled the spaces between the piers with river stones and pebbles.

FIG. 16. Part of Fikellura vase. Sector PN.

The sandstone masonry of the base was laid on a layer of greyish lime. During a Roman rebuilding (after the earthquake of 17 A. D.?) the base was strengthened and extended to the western cella wall by the insertion of a wall of mortared rubble. In this form, its shape corresponds to that of the Roman base of mortared rubble in the western cella.[44] Some of the sandstone masonry was reset during these Roman repairs.

[43] It should be noted that in Butler's system levels are given as "plus" and "minus" in relation to his datum line on the *pteroma* floor at the southeast anta. Concerning the stratification of the pit, it may be added that the last meter (— 2. to — 3.) was nearly devoid of sherds. M. C. Bolgil suggests that the sherd-rich fill to ca. — 1. may represent intentional fill. Similar sherds were found, however, in the water-laid strata south of the Artemis Temple at levels from — 2.36 to — 4.47 and — 2.8 to — 4.6 in 1958. Cf. BULLETIN 154, pp. 8 f.

[44] In the Hellenistic plan the statue base stood slightly off the wall of the cella. After the first neocorate under Antoninus Pius a colossal statue of Antoninus

The sounding has been filled in and the image base will be restored in 1961.

"The Pyramid Tomb."

In 1914, H. C. Butler had excavated the stepped base of a remarkable structure he compared to the tomb of Cyrus at Pasargadae.[45] In 1960, C. H. Greenewalt, Jr., rediscovered the monument, almost completely buried by the collapse of the steep hillside into which its southern part was cut. From August 8 to 16, Greenewalt re-excavated the western and northern part of the monument. Less than half (2.8 m.) of the south side was cleared.

The "Pyramid Tomb" is located on the southern side of a wadi descending to the culvert of the new road ("k" in Fig. 1). The bottom of its lowest step is at ca. 167 m. a. s. l.[46] Its stones had been disturbed both by Butler's excavation and later stone robbers. In general, Butler's findings were confirmed. A trench dug east-west through the center of the monument disclosed a layer of disintegrated greenish stone and a stratum of limestone chips from trimming of stones *in situ*. There is no evidence that any chamber or hollow space existed under the stepped base. No reliable dating evidence was found, but the unique character of the masonry supports Butler's suggestion that the monument is pre-Hellenistic.

New and not recorded by Butler was a rubble wall running east-west which would have overlapped the lowest step of the west side of the monument and is therefore presumably later. Slightly to the south of this wall was a niche cut east-west into the conglomerate. It contained an empty Lydian terracotta sarcophagus.[47]

Time and means permitting, we plan to re-excavate the entire structure.

stood on the base in the eastern cella and that of his wife in the western. A fragment of the head of the Emperor is still in the temple; the head of his wife was found by Dennis and is in the British Museum. Cf. *Sardis* 1 (1922), pp. 7 f., Ill. 57 and Ill. 2 (Faustina Maior); cf. M. Wegner, *Die Herrscherbildnisse in antoninischer Zeit* (1939), pp. 27, 157, Pl. 13 b. On the neocorate cf. *Sardis* 6:1 (1932), p. 72. It seems certain that the reconstruction of the base was undertaken for a new image, but our evidence does not suffice to decide whether the repair took place ca. 20 A. D. or ca. 140 A. D.

[45] *Sardis* 1 (1922), pp. 167 ff., Ill. 174, 185-188. Was this the structure which Xenophon thought the tomb of King Abradatas and his faithful wife Pantheia? Though their touching story is apparently apocryphal, it may indicate the existence of an important Persian tomb from the time of Cyrus ". . . on a certain hill . . . by the river Pactolus . . ." Xenophon, *Cyropaedia* 7:3.2-16 (this reference was supplied by Mrs. A. S. Denholm).

[46] Levels in above-sea-level scale were based on the fixed point at Kagirlik Tepe (188.98.80, cf. Bulletin 154, p. 13). Architectural work on the excavation was done by M. C. Bolgil. Greenewalt has identified and numbered the masonry blocks of the monument.

[47] This, too, unrecorded by Butler—surprisingly, as the east end of the sarcophagus was but 0.5 m. from the west side of the "Pyramid Tomb." Dimensions: 1.53 by 0.44, height 0.21 m.

THE ACROPOLIS.

Excavation of the Acropolis [48] was begun on July 11 and continued until August 28 under the supervision of D. P. Hansen. A. B. Casendino, assisted by R. A. Mayers and C. F. Rogers, was responsible for architectural recording. Four points above sea level [49] were established on the central height (AcT, Fig. 1) by Ali Sait Tütün, Director of Cadastral Survey, Salihli. Figures used in the following are in a. s. l. levels.

In its present state, the citadel is clearly divided by the three heights of the Acropolis.[50] The northernmost height, which is the highest, rises to a sheer peak. It is eroded precipitously on its western flank, and large parts have fallen to the east. Its northern side, somewhat less affected by landslides, descends on a broad front toward the Hermus valley.[51] In our reports this northern height will be designated AcN, "Acropolis North."

Connected to the northern height by a narrow neck, the central part of the Acropolis has preserved a sizable area of the Byzantine citadel. At present the site slopes from a narrow height in the northeast corner to broader expanses on the west and south. The south side is held in place by the mighty Byzantine wall. This central area will be designated AcT, "Acropolis Top."

The southern platform, somewhat lower again (394. as against 404.) is at present connected to the central area by a ridge on top of which the Byzantine fortress wall continues from AcT. This AcS, "Acropolis South," approximates a triangle in shape (ca. 55 m. west, 65 m. east, 40 m. south side). The Byzantine wall is preserved on the western and southern sides. On the southern, it carries a brick structure (ca. 42 m. long, 5.-5.5 m. wide) which we shall call "Byzantine Barracks." [52]

The very steep but not precipitous southern slope of the central height, turned toward the Tmolus range, apparently served as the major access to the citadel. It is the only side of the Acropolis which has not been radically changed by landslides during the Middle Ages.

[48] In 1922, T. L. Shear dug on the Acropolis ". . . several pits in the southeast corner . . . near the breach in the wall." He reported that "abundant deposits of Lydian pottery were reached . . . in one case at 3.55 m.," probably in the still visible pit just east of our Trench E. Cf. *AJA* 26 (1922), p. 401.

[49] Point A, 17.5 m. east of the southwest tower and 4 m. north of the Byzantine wall, 404.44.20 a. s. l.; Point B, 20 m. north of Point A, 405.68.20; Point C, 45 m. east of Point B and 30 m. from northeast corner of entrance, 405.70.70; Point D, 7.5 m. northeast of northeast corner of entrance and 3.5 m. north of the Byzantine wall, 400.20.20. A plan of the central and northern platforms of the citadel was drawn by A. B. Casendino.

[50] Plan of the entire area, Sardis 1 (1922), Pl. 1. Cf. for views also Ill., 18, 86, BULLETIN 154, Fig. 2.

[51] A good view from the north, *Sardis* 1, Ill. 4. The ground slopes in the upper part, is then disrupted by precipitous declivities, and resumes as a slope in the lower part. Subterranean passages in the middle zone leading uphill were observed and partly followed by Greenewalt.

[52] A brief description of the Byzantine wall with several illustrations is given by H. C. Butler, *Sardis* 1 (1922), pp. 21-24, Ill. 1, 8, 13-15. Our "Byzantine Barracks," Butler's "redoubt", were already drawn, not very accurately, by De Peysonnel in 1750 and are seen in Butler's Ill. 13 on the right.

In 1960, one large trench was dug on the northern face of AcN, five trenches were made on AcT, and one on AcS.

"Acropolis Top" (AcT).

Trench A (14 m. east-west, 10 north-south) ran eastward from the western edge at the southwest corner. Trench B (10 m. east-west, 5 m. north-south) was just east of A. Trench C (17 m. east-west, 10 m. north-south) ran from the eastern edge of the platform near the southeast corner. Trench D (10 m. northeast-southwest, 3 m. wide) was a cut through a long ridge in the northern part of the platform which promised an important structure but produced only an inferior brick and rubble wall. Trench E descended the slope toward the present entrance in the south (Byzantine) wall for a total length of 27 m. and was 6 m. wide in its higher part, with an extension of ca. 7 m. dug to the base of the Byzantine wall.

These tests have revealed an extraordinary disturbance in which buildings of all periods earlier than the Byzantine were eradicated and, at least in some parts, the Acropolis was scraped down to its native conglomerate. Such drastic and desperate spoliation may have occurred during the building of the Byzantine wall (fifth century A. D.?), which includes thousands of stones robbed from buildings as early as the fifth century B. C. and as late as the fourth century A. D.

Early Byzantine spoliation cannot, however, account for the extraordinary piling up of sand, gravel, and fill to a height of several meters which we encountered in Trench E, and it cannot explain why the only structural remains found so far belong to the latest phase of the citadel, from the eleventh through the fifteenth centuries A. D. That the entire western side and most of the eastern side of the Byzantine wall on AcT were precipitated downhill along with the ground on which they stood argues for a catastrophe produced by nature rather than man. This catastrophe may have been the same earthquake that buried the Byzantine reservoir in the Temple of Artemis (late seventh century A. D.?).[53]

The evidence then is for a phase of spoliation followed by a natural catastrophe.

A detailed description of the disjointed and poorly built structural remains must be deferred to the final report. Two late building levels (404.6; 402.6) were observed in Trench A, one (405.-403.7) in Trench B. The depth from the surface to native conglomerate was only 1-2 meters. The fill was thoroughly disturbed, but finds of Byzantine and possibly Islamic glazed wares came from stratified locations. Coins, not safely stratified, ranged from Isaac I (A. D. 1057-1059) to Turkish coins of the fourteenth or even fifteenth century.

[53] Cf. *Sardis* 1, pp. 52, 69 and *Sardis* 11, p. ix, on the coin lacuna of 668-867 A. D. Our trenches near the temple produced no evidence for habitation between the fifth and the tenth century A. D. Note, however, that the geologist Warfield assumed only one major earthquake, that of 17 A. D., and attributed subsequent burial of the temple, where "the present level was reached in the tenth century A. D." essentially to the activity of torrents. *Sardis* 1, p. 179.

Trench C (402.5-400 levels) disclosed somewhat more concrete remains of two major building phases. Five areas were distinguished. Hearths made of broken tiles (Areas 1, 5) and a brick cistern (Area 4, top at 401.8, bottom 398.3) were the more noteworthy features. Coins in deep fill dated from the twelfth to the fifteenth century. A coin of Manuel I (A. D. 1145-1180) was found 10 cms. above the floor of Area 1. A coin of Isaac I or Constantine X (1057-59; 1059-1067) (Area 1, 401.8, under the floor of the upper level) may belong to the earlier level of which some wall fragments and a floor (at 400.) were found.

Trench E was dug to a depth of nearly 4 meters (404.-400.) at its northern end and over 3 meters (397.8-394.5) at its southern end by the Byzantine wall without reaching the native conglomerate. Patches of three successive floors were observed (401.8; 401; 399.8), the lowest of which showed traces of burning. A poorly preserved room belonged to the second phase. Above and below this lowest floor there was a heavy accumulation of loose earth, pebbles, and sand which made work to any depth very dangerous.

An intriguing feature of these test trenches was the appearance of much Lydian and some Perso-Lydian ceramic material. It was scattered through the fill in all trenches, but in Trench A it was lying in "pockets," hollows in the native conglomerate which may be bottoms of either storage bins or cisterns. In Trench E, layers of sand and gravel at the bottom (reached by pits dug to 399. in the northern, 396.5 in the southern part) contained much Lydian pottery.[54]

All varieties of archaic Lydian pottery known from excavations in the plain are represented, as well as Eastern Greek Orientalizing and archaic, Chiote, Clazomenian, "Waveline Ware," Corinthian, Attic black-figure and Attic "patterned" (palmette) glazed ware. The earliest datable pieces belong to the first half of the seventh century. The cauldron (fragments, Fig. 17) in partly Geometric, partly Orientalizing style features a spear-swinging hunter leading a dog on a leash, along with a lion, a bull, and a bird.[55] The incomplete rectangular terracotta plaque painted in red and black on white (Fig. 18) shows a lion (?), two jumping deer, and a bird. Color scheme and the "floating" composition recall Phrygian designs.[56]

Out of a pocket in the conglomerate of Trench A came the fragments of a magnificent black-figure "merrythought cup" (part of the fragments, Fig. 19) imported from Athens just prior to the fall of Croesus (547 B. C.). On the exterior is a lively battle scene and the hunt for

[54] This is a couple of meters east of Shear's pit, cf. n. 49, *supra*.

[55] P. 60.269, Trench A, at 402.6. The most advanced figures (bull) are parallel to Rhodian work such as the crater in Istanbul, *Met. Museum Studies* V (1934-1936), pp. 117 f., Figs. 2, 3. Cf. also Schiering, *op. cit.*, Pl. 3:1. Somewhat similar semi-geometric animal, plate from Dadia, *HSCP* 61 (1953), p. 21, n. 88, Fig. 10 a. The bird might be shown next to a lyre, cf. *HSCP, ibid.*, Fig. 5, from Old Smyrna.

[56] T. 60.496, Trench E, ca. 3 m. below surface, 5 m. north of Byzantine wall (396.5 m.). For Phrygian "floating" animals cf. a red-polished jug found in Gordion in 1951. The dotted rosette, standard in Protocorinthian, occurs on the earliest Rhodian wild goat vases in this form. Cf. Schiering, *op. cit.*, Pl. 3:1 and Beil. 3.

FIG. 17. Fragments of hunter vase. Acropolis, AcT, Trench A.

FIG. 18. Fragment of bichrome terracotta plaque. Acropolis, AcT, Trench E.

the Calydonian boar; an inscription says, *chaire kai p(ie eu)*, "drink well and be merry." A sigma is preserved on another fragment. On the interior we recognize a running male figure and the inscription . . *no* . . *irgeoseme*.[57]

Several arrowheads of types considered Near Eastern and used from the eighth into the fifth century B. C. came to light on both AcT and AcS. Most probably they are mementos of the Persian attack during the last stand of Croesus in 547 B. C., but neither the Cimmerian assaults

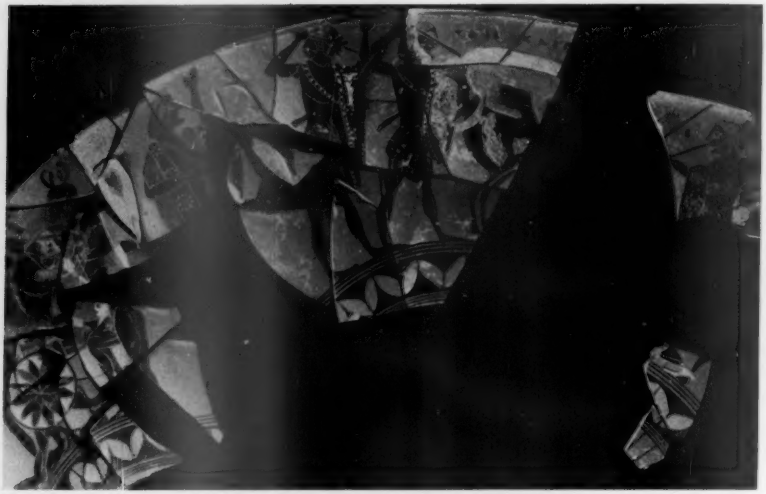

FIG. 19. Fragments of Attic Black-Figure cup. Acropolis, AcT, Trench A.

of the seventh century nor the Ionian attack of 499 B. C. can be ruled out.[58]

An important but poorly preserved piece of archaic sculpture was discovered in the Byzantine cistern of Trench C. It is the body of a lion done partly in the round, partly in relief (Fig. 20). Cuttings on the back prove that the piece served as the side of a marble throne,

[57] Perhaps *eirgeose me*, "worked me"? preceded by the potter's name? The date is around 550 B. C. D. von Bothmer compares the Boston Polyphemus "merry-thought cup." M. Mellink calls attention to the unusual helmet with horns and animal ears worn by one of the warriors, to which there are, according to her, black-figure parallels from Lindos and Phanagoria (in Moscow). On the meaning, cf. Chr. Kardara, *AJA* 64 (1960), p. 352, Pl. 101:26.

[58] Similar arrowheads found at Gordion were at first attributed to the Persian attack but now to the Cimmerians. Those of Old Smyrna come from the attack of Alyattes, ca. 600 B. C. Cf. *Archaeology* 6 (1953), p. 166, Fig. 10. R. V. Nicholls, *BSA* 53-54 (1960), pp. 129 ff., Pl. 6 d.

almost certainly for an image of the goddess Cybele. This may be the earliest piece of marble sculpture known from Sardis.[59]

From a spot deep in Trench E came a cover tile with palmette design of the fifth or fourth century, virtually identical with another tile from "Pactolus Cliff." Some pottery of the same age, besides some of the Hellenistic period, was found, and a Hellenistic stele had been built into a wall in Trench C. Two Hellenistic coins were unstratified. Roman and Early Byzantine finds are, so far, scarce.

"Acropolis North" (AcN).

The great contribution to the history of Sardis in the Hellenistic period came from the excavation at AcN (Figs. 1, 21, 22). Here Hansen, Casendino, Bolgil, and Greenewalt had spotted a row of stone blocks.

Fig. 20. Lion from archaic marble throne.
Acropolis, AcT, Trench C.

Subsequent excavation by Hansen revealed a marble tower of fine Hellenistic masonry joined to the west by a wall of greenish sandstone.[60] The sandstone wall is seen on the upper right of Fig. 21 and to the right of the "butt joint" in the elevation (by A. B. Casendino), Fig. 22. According to A. H. Detweiler, the sandstone wall was trimmed for the construction of the tower and may thus be earlier, possibly Persian. The tower and the areas to the east and west were re-used in Middle Byzantine times.[61] An example of the glazed pottery is shown in Fig.

[59] I am inclined to date the piece not later than the early sixth century B. C. A relief from Bin Tepe may be as early or earlier, *BMC Sculpt.* 1:1 (1928) B. 270, Fig. 165.

[60] Local informants state that T. L. Shear tested the area, but he makes no reference to this structure in his report in *AJA*, 1922.

[61] This is proved by several coins of the eleventh and twelfth century (also one Crusador coin) and the glazed pottery. It is not clear whether the area was also refortified in late Roman and Early Byzantine times. A coin of Flacilla (A. D. 379-386) and several stone and metal objects may belong to that period.

23; the tower and the sandstone wall gradually run out against the conglomerate of the Acropolis (Fig. 22). We have not been able to pick up any continuation of either.

FIG. 21. Acropolis North. View of Persian (?) sandstone wall (upper right), Byzantine rubble wall (right foreground), and Hellenistic marble tower.

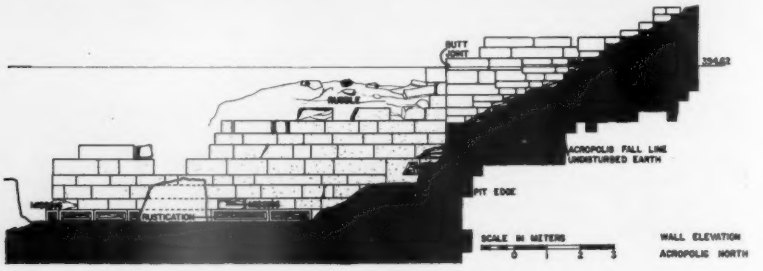

FIG. 22. Acropolis North, elevation. Left: Hellenistic tower; right: Persian (?) sandstone wall.

At the base of the Hellenistic tower was a layer of marble chips from the dressing of masonry *in situ*. A coin of Antiochus III (222-187 B. C.) dates the layer and thus the construction.[62] The Seleucid king had for

[62] Hansen remarks that the fill into which the foundation of the Hellenistic wall was set "was clearly deposited in the Hellenistic period. Sherds were con-

two years (217-215/4 B. C.) besieged the citadel, in which his rival Achaeus [63] had taken refuge. The final capture of the city (though not the citadel) was effected by an attack on the north slope of the Acropolis, and Antiochus was perhaps trying to remedy a weakness in the defenses which he himself had discovered.

That earlier defenses had existed on the slope was suggested by a burned layer, the fall of which was traceable in the earth in front of the Hellenistic tower. Within it lay the attractive archaic relief of a

FIG. 23. Byzantine or Islamic glazed bowl. AcN, south of Hellenistic tower. Purple and green on white. D. 0.24 m.

boar (Fig. 24). Two rings protruding from its back indicate a possible use as implement or part of a piece of furniture.[64]

By coincidence, at the same time that the importance of Antiochus III as builder of the defenses of the citadel was being disclosed by our excavation, an inscription brought in by peasants proved to be a decree of the city of Sardis from his reign. According to L. Robert's suggested restoration (by letter), it mentions Zeuxis, satrap of Lydia at the time.

sistently Hellenistic (derivative Lydian, palmette and rouletted black-glaze, fish plate derivatives)."

[63] A coin of Achaeus was found within the tower area (at 391.6), but it was not well stratified, C. 60.56. Cf. Polybius 5:77, 7:15, and *S. L.*, pp. 32 f.

[64] M. 60.24, at 391.5, L., 0.095 m. A similar but smaller (L. ca. 0.04 m.) boar of unknown provenance is in the British Museum. It has a somewhat different attachment for two crossing rods; this in turn is repeated on some ivories from Ephesus. Cf. D. G. Hogarth, *Excavations at Ephesus* (1908), pp. 176 f., Fig. 33. D. E. L. Haynes kindly tells us that another boar of this kind is in private possession in England. The piece will be published in detail by D. P. Hansen.

AREA OF BUILDING "B"—COMPLEX "EAST B."

The large-scale effort made between June 26 and August 30 was directed chiefly toward ascertaining the major features of the plan of the complex "East B"[65] (Figs. 1, 2). D. G. Mitten was archaeologist in charge, in cooperation with A. B. Casendino as architect; upon his arrival in August, A. H. Detweiler supervised the work. In the first phase, tops of piers and walls were traced in the building "East B." Subsequently, two-thirds of the small entrance court, the so-called "Marble Court," were cleared (marked by legend "East B" in Fig. 2) and a trench made to prove the existence of an outer colonnade to the east. The façade of a unit south of the "Marble Court" was traced and beyond it a curvilinear structure of brick with three niches, possibly a nymphaeum. On the southern side, a line of Byzantine shops (Fig. 2) is now known to extend eastward for more than 50 meters. The northern boundary of the complex was traced for some 25 meters. It consists of powerful masonry serving as a retaining wall. In the final week, a small area was opened (in squares E 90/100; N 100/110) to determine the existence of a colonnade around the large court. Outside of "East B" complex, some work was carried on at the center and at the northwest corner of the complex "West B" (Fig. 2). Surprisingly, the western boundary of this complex continues northward beyond the northern boundary of Building "B" itself. All told, areas totaling over 3,500 sqm. were excavated with the aid of two trucks and a labor force averaging around 50 workmen.

The plan of this grandiose complex, tentatively restored by A. B. Casendino (Fig. 25), resembles the plans of the gymnasia of Ephesus.[66] The major east-west axis runs through the center of Building B. From the east, a large colonnaded court (palaestra?) formed the approach. Details are still conjectural, as the area excavated revealed only the latest state. At that time shop-like units with much disrupted mosaic flooring lay at a level somewhat higher than the foundation course of the northern colonnade. Outside (south of) the colonnade, imprints of slabs on concrete bedding prove that the central court was paved with marble. On the west side of the large court, too, only the foundation course for the colonnade was found (square N. 65; E. 42, Fig. 2).

Passing through an inner colonnade of ten columns,[67] the visitor arrived in the smaller "Marble Court" from which a triple gate led in a manner still unknown into the central unit of Building B (Fig. 25). The "Marble Court" was flanked by two rectangular units, accessible through smaller colonnades of three columns. Only the southern of these units has been excavated, and that incompletely.

The plan of the "Marble Court" featured semi-circular exedrae on the south and the north sides. Entrances to these were narrowed when

[65] Cf. BULLETIN 157, p. 38, Fig. 8.

[66] Cf. F. Miltner, *Ephesos* (1958), pp. 58, 74, Figs. 50, 65. J. Keil, *Ephesos, Führer* (1957), p. 78, Fig. 42.

[67] The lower order consisted of unfluted double-half columns on Ionic bases with Doric capitals.

FIG. 24. Archaic bronze boar. AcN, below Hellenistic tower.

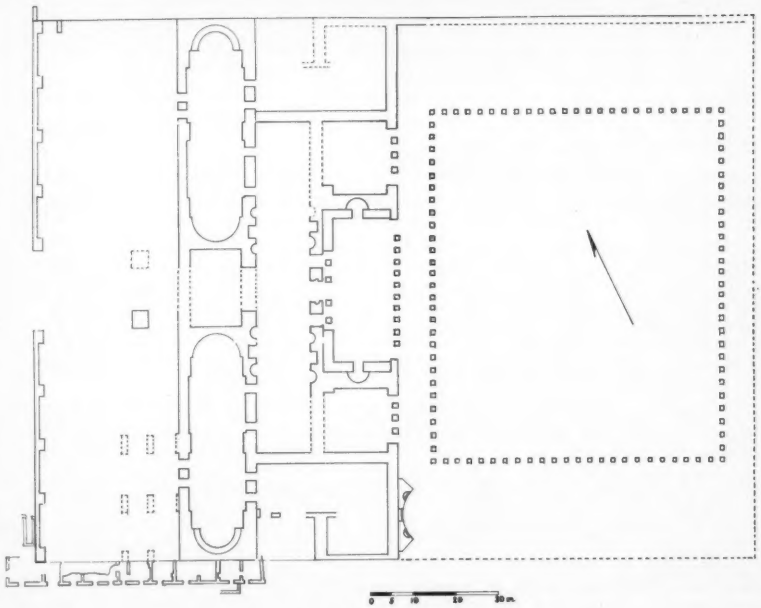

FIG. 25. Complex B. Tentative restoration of plan.

magnificent columnar marble façades were added on the sides of the court and in front of the triple gate (Fig. 26). Four monumental, spirally fluted columns with composite capitals stood in front of the gate. They seem to have carried a pediment; and A. H. Detweiler has recognized parts of a central arch within the pediment.[68]

We can now distinguish three phases in the history of the complex "East B." The original unit, "Building East B" proper, between the large court and Building B (E. O-E. 35; S. O-N. 112, Figs. 2, 25) was constructed at the same time as Building B, during or before the reign of Lucius Verus (A. D. 161-169).[69] Both buildings feature limestone piers linked by walls of mortared rubble with "lacing" brick courses. Long sequences of arches run north-south and east-west.

The addition of marble façades to the "Marble Court" is dated with great precision by the dedicatory inscription on the architrave, of which the first fragment was found in 1959 and many more in 1960. It mentions the Empress Julia Domna and her sons, Caracalla and Geta; Geta's name is erased and so is that of the *proconsul Asiae*.[70] The inscription was begun after the death of Septimius Severus (February 4, A. D. 211) and "amended" after the assassination of Geta (February, A. D. 212.)

Replacement work is indicated for the late third or fourth century by the bizarre heads from Corinthian capitals found in the unit south of the "Marble Court." The head illustrated portrays Hermes (Fig. 28); another head, more battered, depicts Silenus. They make a striking contrast to the beautiful head of the laughing Faun from a similar capital of the second century.[71]

A major transformation occurred in the Early Byzantine Age, at the time when the entire area was made part of the city's defenses. Part of the new city wall was built on top of the monumental profile which crowns the retaining wall of the northern side. The side gates of the triple gate in the "Marble Court" were walled up (Fig. 26, center), and rubble walls were built between the columns of its eastern colonnade. The pavement, too, was relaid at a higher level.[72] The best proof of a reconstruction is furnished by a Byzantine inscription in metrical form. It was carved on blocks placed *above* the original moulding of the piers

[68] Several voussoirs of the arch have been found. Richly decorated members of the orders seem to indicate that the façades were two-storied and stood on piers (H. 2.25 m., W. 2 m.). At the central gate the columns went up from Ionic bases at ground level (Dm. 1.3 m.). The dedicatory inscription is carved on the top two fasciae of the lower architrave. The over-all dimensions of the court are 36.5 m. by 17.5 m.

[69] S. E. Johnson, BULLETIN 158, pp. 7 ff., Figs. 2 f.

[70] BULLETIN 157, p. 38, Fig. 20. Enough of the names is preserved to make the reconstruction of those three certain. The inscription states that an *apoleipterion* (hall for oiling) was built "with all ornamentation," *syn panti kosmoi*. I am indebted to H. Bloch for help with preliminary reading. The inscription will be published by L. Robert.

[71] Hermes, S. 60.25, H. 0.32 m. Two wings over temples. For the faun from the entrance colonnade cf. BULLETIN 157, p. 38, Fig. 21; for Athena capital, *ILN* (July 9, 1960), p. 62, Fig. 10.

[72] BULLETIN 157, p. 38. Similar patterns of lozenges and hexagons were found in the large court.

(bench) of the marble façade and ran along the south side and the southern part of the west side of the court. It is very fragmentary and obscure in parts, and the name of the builder is nearly entirely destroyed; but it celebrates a major restoration with allusions to a great work, "roof gleaming with gold," and "ever-living ornament."[73] There is every reason to hope that we shall find the next instalment on the north side. The poem or poems are quite certainly of the fifth or the sixth century A. D.[74]

It seems likely that "B" was abandoned during the Persian invasion under Heraklios (A. D. 615-617) but the immense upheaval of architectural parts, some weighing several tons, can hardly be due to any cause but an earthquake (Fig. 26). When this upheaval took place is not known. A coin of the twelfth century A. D. found in accumulated earth near the top of a wall suggests that at least parts of "East B" were buried by that time.[75]

Fragments of sculpture of the second or early third century were found in the "Marble Court," such as the torsos of a draped female statue and of a dancing satyr, a dog's head, and a slightly over life-size female head from a relief (Fig. 27).[76] An incomplete *epipedoglyphon*, Early Byzantine relief with roughened background, shows two leaves as well as a bull and a lion (of the Evangelists?),[77] evidence perhaps for the "ever-living ornament" of the Byzantine restoration.

Building "CG."

At Building "CG" (for location cf. Fig. 1), Swift, Greenewalt, Whallon, and the writer took turns supervising the excavations, while Mayers and Bolgil attended to the architectural recording. Over 600 sqm. were excavated. A trench laid around the southern end of "Structure

[73] The poem along the south side seems to have started with a statement by the spectator: "I am amazed wherefrom such a work (arose). . . ." The next large fragment speaks of "endless (expanse?) of the gold-gleaming roof." Then came the answer containing the name of the builder, of which only . . . *nonios patres genee* is preserved. A long fragment of the west side starts "built the ever-lasting ornament—*teuxen kosmon aeizoonta*—which envy . . . (presumably, cannot destroy)." E. Kitzinger and C. Mango recalled the poems of this type in *Anthologia Palatina* I, and for a possible double-meaning of "ever-living ornament" (Kitzinger) the *semata Christou* in the Christian mosaic inscription from Kourion.

[74] A coin of Justinian is so far the only reliable witness, cf. BULLETIN 157, p. 38; a coin of Maurice Tiberius (A. D. 582-602) found in 1960, C. 60.83, probably goes with it.

[75] It was found at E. 10/N. 15 in the southwest part of "Building East B." On the other hand, a Middle Byzantine coin was found over a concrete floor in the large courtyard, in the southeast corner of the trench dug to locate the outer colonnade in front of the marble court, at N. 60/E. 50: C. 60.115.

[76] S. 60.21, H., 0.22 m. The back has cuttings for attachment to a wall. One is reminded of allegorical figures or deities in such reliefs as the monument of Verus in Ephesus and the reliefs from the Agora in Izmir.

[77] S. 60.10, two joining fragments, incomplete. Found in front of the south gate within the "Marble Court." E. Kitzinger, who has been collecting material on this type of relief, has kindly given me references to numerous pieces from Greece, Italy, and the Crimea. According to Kitzinger, an earlier group, of the fifth and sixth century, and a later Middle Byzantine one may be distinguished.

FIG. 26. "East B." Marble court with triple gate, viewed from the north.

FIG. 27. Roman marble head. "East B," marble court.

CGW"[78] and across to the southern end of CGE brought to light a toppled arch of masonry which spanned the space (ca. 12.4 m.) between the two structures. This is proof that the two parallel masonry structures CGE and CGW formed the long sides of a hall, which we must probably envisage as covered by a vault of masonry such as may still be seen in the baths of Hierapolis a day's journey inland. The design and con-

FIG. 28. Marble head of Hermes, from a Corinthian column. "East B," unit south of marble court.

struction of the baths at Hierapolis[79] are so similar as to suggest the same function and perhaps even the same school of architects for CG.

Again the industrial level of ashes and slag was observed and its dating to the tenth century confirmed by yet another coin of John Zimisces (A. D. 969-976).[80]

[78] Cf. the plan, BULLETIN 157, pp. 38 ff., Fig. 39.

[79] Cf. C. Humann, "Altertümer von Hierapolis," *JdI, Ergänzungsheft* 4 (1898), p. 5, Figs. 8, 9. Work on the site is going forward under P. Verzone, cf. *Dergi* 8 (1958), p. 20.

[80] For earlier finds cf. BULLETIN 154, pp. 21 f., n. 46. The new coin lay under the collapsed arch; the collapse thus took place after the tenth century A. D. For the "industrial level", cf. BULLETIN 154, p. 21; and 157, p. 40. In the excavation of 1960 it was seen to extend beyond the south end of the masonry building at levels ca. 101-100. A local potter made the interesting suggestion that the slag may

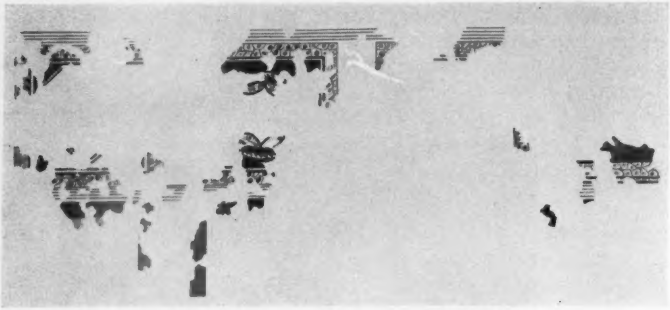

FIG. 29. Drawing of fragments of wall paintings. Complex CG, wall NS.

FIG. 30. Roman marble relief with flying figure.

The walls of the rubble units north of the masonry unit CG had suffered from several collapses during the winter. Consolidation and repairs were undertaken in the circular unit Hm and in the rectangular unit north of Hm.[81] A corridor along the north side of Hm was excavated to 96.5, to some 6 meters below the top of the walls, and the level was lowered by 2 meters (to ca. 98) along wall NS. It appears that arcades were originally a feature in the lower parts of the walls in both Hm and the unit north of it. Subsequently, additional walls and arches were built into the unit north of Hm, chiefly in brick. The corridor which ran east-west just north of Hm was at that time vaulted. The staircase ST mentioned in the previous report descended to this corridor. On top of the vault, in the corner formed by Hm and the wall NS, a well-preserved floor on top of the vault (98.67) yielded a lamp of a type current from the third through the fifth century A. D.[82] Numerous fragments of polychrome marble revetments were found, especially in the corridor; a marble profile was still *in situ* on its wall (98.8).

An important discovery was made when fragments of wall paintings appeared on walls NS (Fig. 29) and A. The fragments on wall NS reach from ca. 101.5 to the deepest point excavated (98.), and the wall paintings indubitably continue downward into unexcavated earth. The drawing (after watercolor by G. Bakir) renders what is still recognizable. A lower zone included large panels in dark blue bands; the upper zone has panels framed in bands filled with fruit-like pink and yellow objects outlined in red. In one panel is a medallion with segmental "fruit motif" surrounded by a circular frame with a "running dog" in blue. The background of all panels is white. In one or two places these are objects which may be representational rather than ornamental (Fig. 29, right), but even while viewing the originals we could not agree on their intent.[83] Recorded mural paintings from secular structures of the Early Byzantine Period are scarce in Asia Minor and the new pictures are a welcome addition.

Remarks on Finds.

More than 800 objects and 130 coins were catalogued. They include a rich representation of pottery of all major periods, lamps from Lydian to Early Byzantine, and a number of terracottas. The first archaic Greek silver coin was found in the fill above the Lydian shops at HoB. Many fragments of sculpture and of inscriptions were brought in from

be refuse from production of glaze. We found an ordinary stone covered with such green glaze, perhaps a trial piece.

[81] They are shown Bulletin 157, Figs. 22 and 23. Grid squares N27-40; 40-55; E. 0-15.

[82] L. 60.47, Broneer Type XXVIII.

[83] The portion of wall N-S on which they occur is drawn in Bulletin 157, Fig. 23. The part seen in our Fig. 29 is approximately 8 m. long and 3 m. high (ca. 101.5-98.5). The peculiar object on the right of Fig. 29 outlined with a double blue band and painted crimson inside might be a circular structure; parts of animals were thought to be recognizable on wall A. Despite the efforts of W. C. B. Young, the colors could only be "brought out" for a short time. J. Washeba will publish a note on the technique of these paintings.

FIG. 31. Archaic marble relief from Dede Mezart.

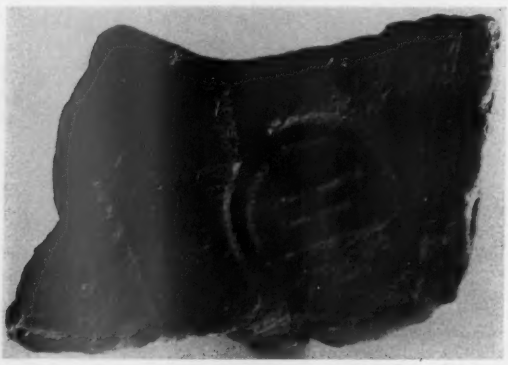

FIG. 32. Stamped tile from Dede Mezari.

the village and the fields. An attractive Roman relief with a flying figure (Fig. 30), a battered, more than life-size head of a Roman emperor (Trajan?), parts of a garland frieze perhaps from the theatre, a heroic figure from a frieze, and the tombstone of a gladiator were among the additions. A remarkable *venatio* frieze so closely resembles the *venatio* scenes carved on a pilaster of the theatre at Hierapolis [84] as to suggest that the Sardian scene of animal games, too, may have come from the theatre.

A late archaic relief retrieved from the village shows a frontal female figure with a necklace of acorn-shaped pendants (Fig. 31). The piece resembles Phrygian reliefs of Cybele, but is closer to archaic Greek work.[85] The owner pointed out the place where it was found at the *türbe* (tomb) known as Dede Mezari, ca. 1.5 km. west of the village of Sart Mahmut and ca. 500 m. north of the Salihli highway. Cut limestone masonry built into the saint's shrine [86] and piles of tiles, some of which are stamped (Fig. 32), awaken the suspicion that this hillock may be the site of a sanctuary.

WHEN WAS THE LATE HITTITE PALACE AT SAKÇAGÖZÜ BUILT?

Hans G. Güterbock

In Bulletin 160 (December, 1960), pp. 43-45, Professor George M. A. Hanfmann has shown that the "Late Hittite" palace on the mound called Caba Hüyük (Jobba Euyuk) at Sakçagözü was inhabited as late as the third quarter of the seventh century B. C. The following remarks are not meant in any way to question the terminal date or its significance for possible contacts of the Greeks with this oriental art. They are only intended to remind the reader of the evidence available for the date of the erection of the palace.

The striking similarity between the relief of the king at Sakçagözü and the statue of a king found in the gate chamber of Arslantepe near Malatya was duly stressed by the excavator of the latter, the late Louis Delaporte.[1] This similarity is not only one of style but includes such details as dress, crown, attitude, and even facial features that give the impression of a portrait. At Arslantepe, the statue, found entombed on the floor, had originally stood on a pedestal in the door chamber. The analogy of the stela of Esarhaddon, which originally stood in exactly

[84] *JdI* Erg. 4 (1898), p. 64, Figs. 12 f. Both representations are remarkable in showing persons riding on bulls as well as a number of bears among the fighting animals.

[85] Cf. R. Temizer, *Anatolia* 4 (1959), Pls. 35-39.

[86] Two pieces have masons' marks—EY and N.

[1] L. Delaporte, *Malatya: Arslantepe*, I: *La Porte des Lions* (*Mémoires l'Institut Français d'Archéologie de Stamboul*, V, 1940), p. 38.

the same position in the citadel gate of Zincirli,[2] immediately suggests that the statue at Arslantepe was the monument of a conqueror just as the stela of Esarhaddon. At Sakçagözü, however, the relief of the king forms an integral part of the original entrance decoration of the palace. The problem thus could be formulated as follows: if we knew of a ruler of a neighboring state who conquered Malatya during the general period indicated by the style of both the Arslantepe statue and the Sakçagözü reliefs, we might be able to assign an exact date to both monuments.[3]

It was B. Landsberger who gave the answer to this question, in 1948, in a publication not easily available: [4] the person depicted in both sculptures can only be Muttallu, the last king of Kummuḫ and, from 712-708, also king of Milid. He helped Sargon in 712 against Tarḫunazi of Milid and received that town as a reward. Similarly he may have been rewarded, around 720, with the region of Sakçagözü, which had previously belonged to Sam'al.[5] In 708, however, he was dethroned by Sargon, and it would be after his liquidation that his statue at Arslantepe was buried.[6]

This identification of the king sets narrow limits for the period during which the monuments in question could be created: Sakçagözü between 720 and 708, the Arslantepe statue between 712 and 708. The well known similarity that connects the lions and the sphinx bases of Sakçagözü with those of Zincirli ("Hilani III" and "Hallenbau P")[7] also speaks in favor of this date.

In conclusion, I would combine the date thus established for the execution of the palace sculpture with Professor Hanfmann's demonstration of the longevity of the building by saying that the palace was decorated in the late eighth century and existed until the late seventh century B. C.

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[2] *Ausgrabungen in Sendschirli*, I (1893), p. 11.

[3] Cf. *Guide to the Hittite Museum in the Bedesten at Ankara* (1946), pp. 71-73.

[4] B. Landsberger, *Sam'al: Studien zur Entdeckung der Ruinenstätte Karatepe* (*Veröff. der Türkischen Historischen Gesellschaft*, VII. Serie Nr. 16, 1948), pp. 76-79: "Die Anlage des Palastes von Sakçegözü."

[5] *Ibid.*, p. 77.

[6] *Ibid.*, with n. 203.

[7] *Ausgrabungen in Sendschirli*, IV (1911), p. 340; Ed. Meyer, *Geschichte des Altertums*, II:2 (2nd ed., 1931), pp. 434 f., cited by Landsberger, *op. cit.*, p. 76; add: E. Akurgal, *Späthethitische Bildkunst* (Ankara, 1949), pp. 48 f.; for the dating of the buildings at Zincirli, R. Naumann, *Architektur Kleinasiens* (Tübingen-1955), p. 368.

EDITORIAL CORRECTION (to BULLETIN 159)

In Dr. Kaplan's article, "The Relation of the Chalcolithic Pottery of Palestine to Halafian Ware," printed in BULLETIN 159 (pages 32-36) a regretable error has occurred. After submitting his original manuscript and drawings, the author visited the Museum at Adana, Turkey, and conceived doubts as to the correctness of the comparison between a fragmentary vessel from Mersin and one resembling it from Wadi Ghazzeh. He therefore wished to omit these examples from his discussion. With this in view, he prepared and submitted a revised draft of his article and a new plate of figures.

Unfortunately, while the corrected text was used as intended, the old plate of figures was printed by mistake, as Fig. 2, so that there is a conflict between the printed text and the designations in the figure from "P" and "PP" onward. "P" and "PP" of Fig. 2 should be deleted and the lettering of the remaining illustrations, in consequence, moved back to agree with the text of the article as printed.

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